

## **COURSE DESCRIPTION & EXAMINATION SCHEME**

Bachelor of Industrial Design (BOID)





## **1ST SEMESTER**

Bachelor of Industrial Design (BOID)





## Design Basics 1 DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



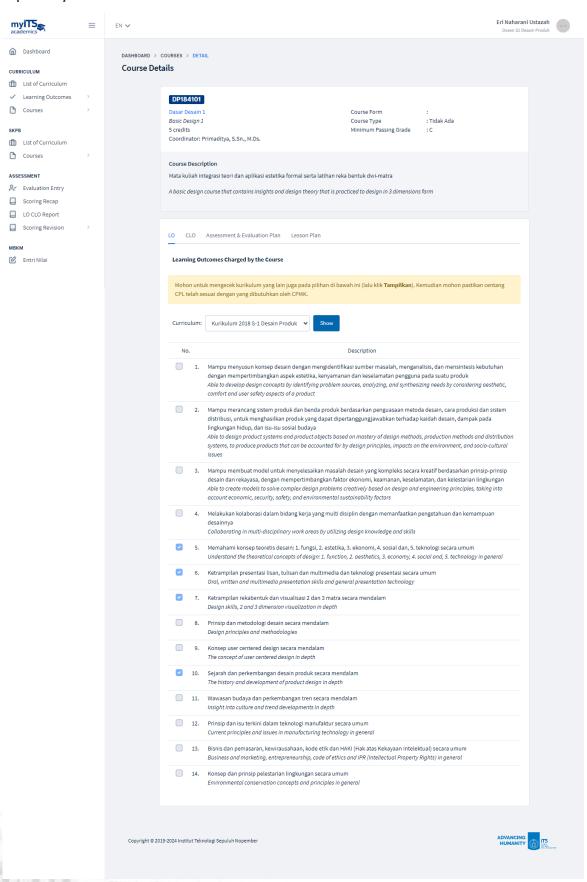
## <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

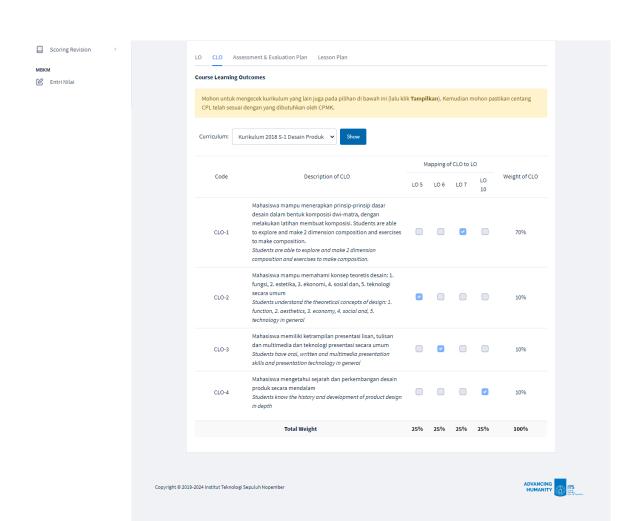
Course unit title	Design Basics 1
Course unit code	DP184101
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	1 <sup>st</sup> year
Semester/trimester when the course unit is delivered	1 <sup>st</sup> semester
Number of ECTS credits allocated	8 ECTS Credits
Name of lecturer	Primaditya, S.Sn., M.Ds.
Learning outcomes of the course unit	<ol> <li>Students are able to explore and make 2 dimension composition and exercises to make composition.</li> <li>Students understand the theoretical concepts of design: 1. function, 2. aesthetics, 3. economy, 4. social and, 5. technology in general</li> <li>Students have oral, written and multimedia presentation skills and presentation technology in general</li> <li>Students know the history and development of product design in depth</li> </ol>
Mode of delivery	face-to-face
Prerequisites and co-requisites (if applicable)	-
Course content	The Design Basic 1 is a course delivered in the first semester, a core subject alongside Drawing 1. It is an integrated course combining theory and practical exercises in the aesthetics of dual-matrix design, serving as the foundation for new students in preparation for advanced design courses in subsequent levels.
	1) Visual design element of line 2) Visual design element of plane 3) Visual design element of size 4) Visual design element of gradation 5) Visual design element of color 6) Visual design element of texture

	1
	7) Visual design principle of repetition
	8) Visual design principle of variation
	9) Visual design principle of balance
	10)Visual design principle of proportion
	11)Visual design principle of harmony
	12)Visual design principle of Gestalt
Recommended or required	Bielefeld, Basic Design Ideas, Boston, Springer, 2007
reading and other learning	<ul> <li>Ching, F. D., Architecture: Form, space, and order.</li> </ul>
resources/tools	John Wiley & Sons. 2014
	• Irawan, Bambang & Priscilla T., Dasar-dasar Desain.
	Jakarta: Griya Kreasi, 2013
	Masri, Andry., Strategi Visual-Bermain dengan
	Formalistic dan Semiotic untuk Menghasilkan Kualitas
	Visual dalam Desain. Yogyakarta: Jalasutra, 2012
	• Wong, Wucius, Beberapa Asaa Merancang Dwimatra.
	Bandung: Penerbit ITB, 1986
Planned learning activities and	Discovery Learning; Case Method
teaching methods	
Language of instruction	Indonesia
Assessment methods and	Assignment, Project, Midterm Evaluation and Final
criteria	Evaluation

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List of Curriculum

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ASSESSMENT

A Evaluation Entry

Scoring Recap

LO CLO Report

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Course Details

DP184101

Dasar Desain 1 Basic Design 1

Coordinator: Primaditya, S.Sn., M.Ds.

Course Form Course Type Minimum Passing Grade

: Tidak Ada

Mata kuliah integrasi teori dan aplikasi estetika formal serta latihan reka bentuk dwi-matra

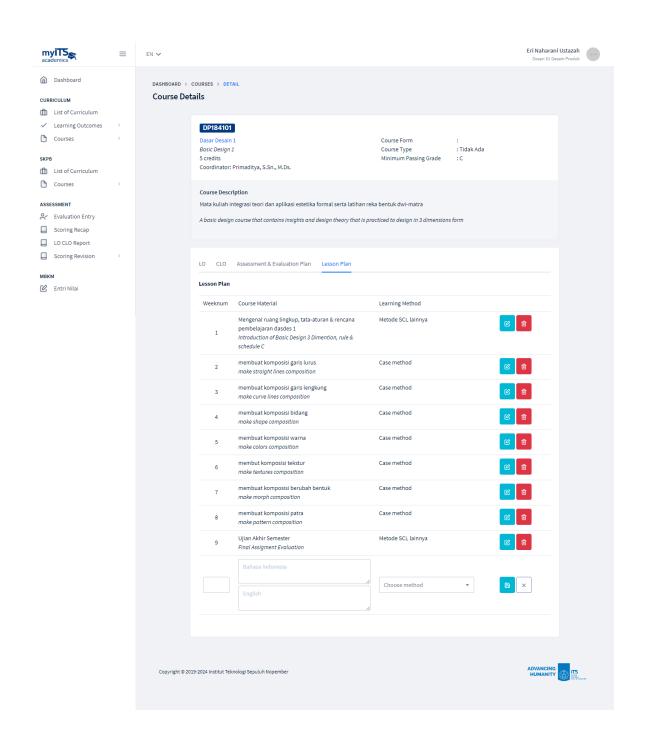
A basic design course that contains insights and design theory that is practiced to design in 3 dimensions form

LO CLO Assessment & Evaluation Plan Lesson Plan

Assessment & Evaluation Plan

. Evaluation Plan		CLO-1	CLO-2	CLO-3	CLO-4	Total Weight
membuat kompos make straight line Kognitif - Tugas   C Assignment	composition	10%	0%	0%	0%	10%
membuat kompos lengkung <i>make curve lines o</i> Kognitif - Tugas   C <i>Assignment</i>	omposition	10%	0%	0%	0%	10%
membuat kompos make shape comp Kognitif - Tugas   C Assignment	osition	10%	0%	0%	0%	10%
membuat kompos make colors compo Kognitif - Tugas   C Assignment	osition	10%	0%	0%	0%	10%
membuat kompos make texture comp Kognitif - Tugas   C Assignment	position	10%	0%	0%	0%	10%
membuat kompos bentuk <i>make morph comp</i> Kognitif - Tugas   C <i>Assignment</i>	osition	10%	0%	0%	0%	10%
membuat kompos make patern comp Kognitif - Tugas   C Assignment	nosition	10%	0%	096	0%	10%
Evaluasi Akhir Sen End Semester Eval Kognitif - UAS   Co Exam	uation	096	10%	1096	10%	30%
TOT.		<b>70%</b> 70%	10% 10%	10% 10%	10% 10%	100% 100%







# Drawing 1 DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023

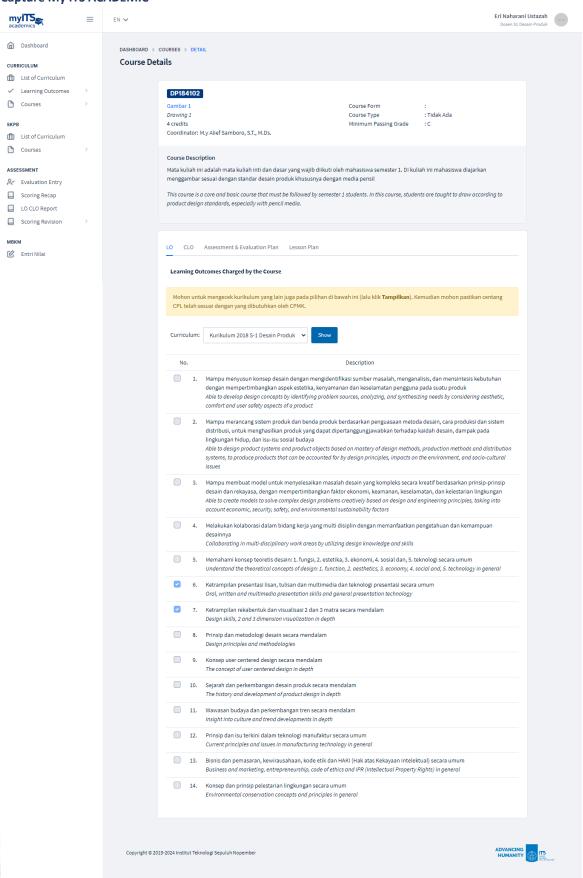
## <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

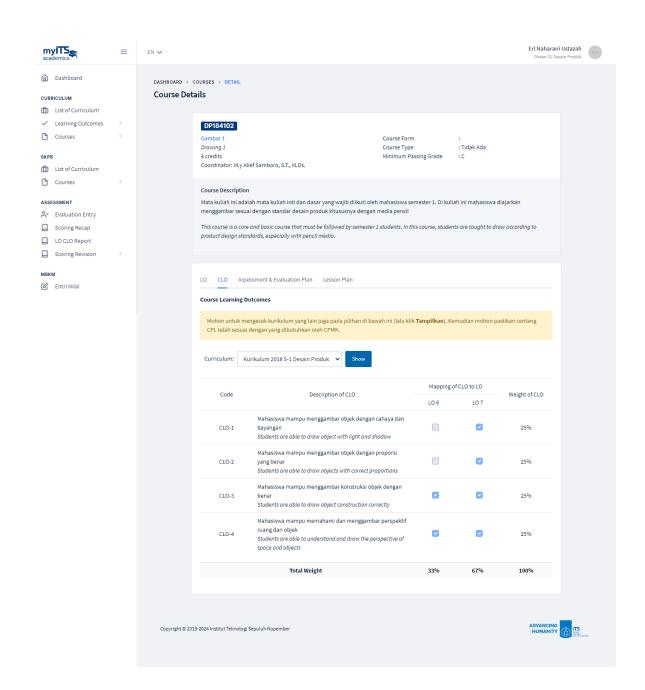
Course unit title	Drawing 1
Course unit code	DP184102
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	1 <sup>st</sup> year
Semester/trimester when the course unit is delivered	1 <sup>st</sup> semester
Number of ECTS credits allocated	6,4 ECTS Credits
Name of lecturer	M.y Alief Samboro, S.T., M.Ds.
Learning outcomes of the course unit	<ol> <li>Students are able to draw object with light and shadow</li> <li>Students are able to draw objects with correct proportions</li> <li>Students are able to draw object construction correctly</li> <li>Students are able to understand and draw the perspective of space and objects</li> </ol>
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	This course is a core and fundamental subject mandatory for first-semester students. In this course, students are taught drawing in accordance with product design standards, specifically using pencil as the medium.  1) Drawing as thinking tools 2) Pencil medium 3) Basic drawing 4) Construction drawing 5) Figure drawing
Recommended or required reading and other learning resources/tools	<ul> <li>Pipes, Alan, "Drawing for Designer", Laurence King Publishers, 2007</li> <li>Erik Olofsson &amp; Klara Sjölén, "Design Sketching", KEEOS Design Books, Sweden, 2005</li> <li>Eissen, Koos, &amp; Steur, Roselien, "Sketching: Drawing Technique for Product Designer", Bis Publisher, 2009</li> <li>Powell, Dick, "Presentation Techniques: A Guide to Drawing and Presenting Design Ideas", Little, Brown,</li> </ul>

	1990 • Waluyohadi, "Gambar Bentuk dan Suasana", Butawarna Publishing, 2015
Planned learning activities and teaching methods	Discovery Learning; Case Method
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

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Courses

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Courses

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A Evaluation Entry Scoring Recap

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Entri Nilai

DASHBOARD > COURSES > DETAIL

### Course Details

DP184102

Drawing 1 4 credits Coordinator: M.v Alief Samboro, S.T., M.Ds. Course Type Minimum Passing Grade

Course Form

: Tidak Ada

Course Description

Mata kuliah ini adalah mata kuliah inti dan dasar yang wajib diikuti oleh mahasiswa semester 1. Di kuliah ini mahasiswa diajarkan menggambar sesuai dengan standar desain produk khususnya dengan media pensil

This course is a core and basic course that must be followed by semester 1 students. In this course, students are taught to draw according to product design standards, especially with pencil media.

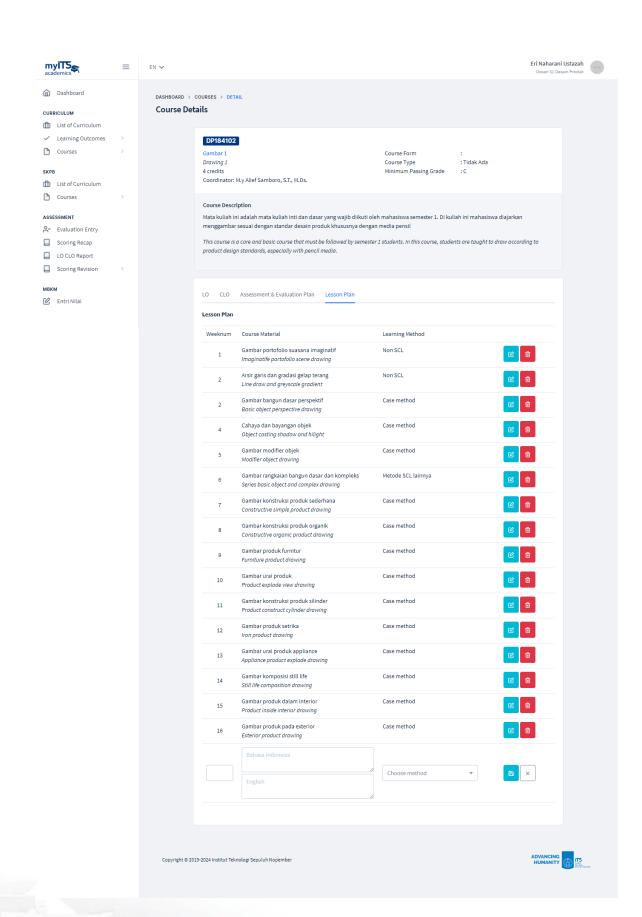
Assessment & Evaluation Plan

LO CLO Assessment & Evaluation Plan Lesson Plan

Total Weight 1 Gambar arsir objek Object shading image Kognitif - Tugas | Cognitive -Assignment 2 Gambar perspektif objek Object perspective drawing Studi Kasus | Case Method Gambar object dengan cahaya dan bayangan Draw objects with light and shadow 096 296 796 Studi Kasus | Case Method 4 Gambar rangkaian objek modifier Drawing of a series of modifier oblects 5 Gambar Konstruksi Produk Product Construction Drawing Studi Kasus | Case Method 15% 6 Gambar urai produk Product explode drawing Studi Kasus | Case Method 296 12% Gambar objek Still life Still Life Object drawing Studi Kasus | Case Method Gambar objek interior Studi Kasus | Case Method Gambar objek eksterior Studi Kasus | Case Method TOTAL 25% 25% 25% 25% 100% Target

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## Physics DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



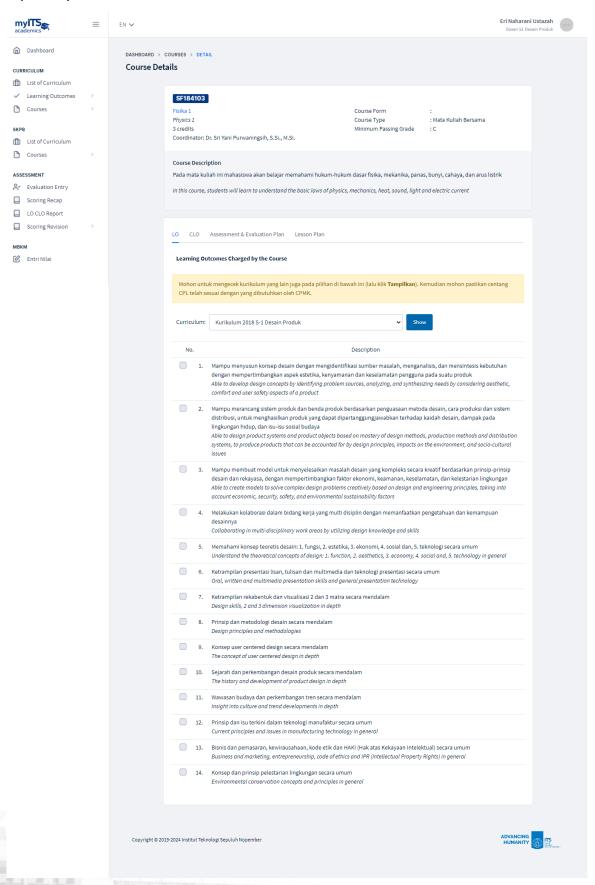
## <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

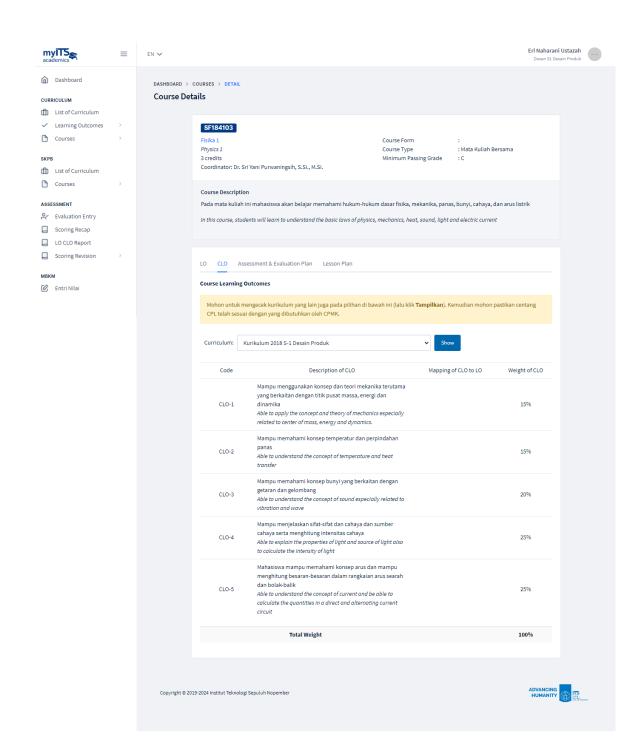
Course unit title	Physics
Course unit code	SF184203
Type of course unit	compulsory
Level of course unit	first cycle Bachelor
Year of study when the course unit is delivered	1 <sup>st</sup> year
Semester/trimester when the course unit is delivered	1 <sup>st</sup> Semester
Number of ECTS credits allocated	4,8 ECTS credit
Name of lecturer	Dr. Sri Yani Purwaningsih, S.Si., M.Si.
Learning outcomes of the course unit  Mode of delivery (face-to-face, distance learning)  Prerequisites and co-requisites	<ol> <li>Able to apply the concept and theory of mechanics especially related to center of mass, energy and dynamics.</li> <li>Able to understand the concept of temperature and heat transfer</li> <li>Able to understand the concept of sound especially related to vibration and wave</li> <li>Able to explain the properties of light and source of light also to calculate the intensity of light</li> <li>Able to understand the concept of current and be able to calculate the quantities in a direct and alternating current circuit</li> <li>face-to-face</li> </ol>
Course content	<ol> <li>Introduction, equilibrium</li> <li>Center of mass</li> <li>Concept of energy</li> <li>Fluid dynamics</li> <li>Heat; the relation of heat and change of temperature; the relation of temperature change and size of the object and quiz 1</li> <li>Heat capacity</li> <li>Heat transfer</li> <li>Simple harmonic motion</li> <li>Reflection and transmission of wave</li> <li>Properties of light; Source of light</li> <li>Intensity of light; flux light and quiz 2</li> <li>Ohm's law; direct current</li> <li>Alternating current</li> </ol>

Recommended or required reading and other learning	Fisika untuk Arsitektur dan desain, departemen     Fisika, 2019				
resources/tools	Fisika untuk sain dan teknik " Mekanika dan Termodinamika", Departemen Fisika 2018				
	3. Fisika untuk sain dan teknik "Listrik-Magnet, gelombang, optik dan Fisika Modern", Departemen Fisika 2018				
	4. Halliday, Resnic, Jearl Walker; 'Fundamental of Physics'. John Wiley and Sons, 10th ed, New York, 2014				
	5. Douglas C. Giancoli, 'Physics for Scientists and Engineers , Pearson Education, 4th ed, London, 2014				
	<ul><li>6. Tim Dosen, "Diktat Fisika I", Fisika FMIPA-ITS</li><li>7. Tim Dosen, "Soal-soal Fisika I", Fisika FMIPA-ITS</li></ul>				
	8. "Petunjuk Praktikum Fisika Dasar", Fisika, MIPA-ITS				
	9. Sears & Zemanky,"University Physics", Pearson Education, 14thed, USA, 2016				
	Tipler, PA, 'Physics for Scientists and Engineers ',6th ed, W.H. Freeman and Co, New York, 2008				
Planned learning activities and teaching methods	Problem-Based Learning				
Language of instruction	Indonesia and English				
Assessment methods and criteria	Presentations, assignments, discussions, quizzes, midterm exam, final exam				

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#### Assessment & Evaluation Plan No. Evaluation Plan CLO-1 CLO-2 CLO-5 CLO-3 Weight 1 Tugas Task 1 Studi Kasus | Case Method 2 Kuis 1 Quiz 1 Kognitif - Quiz | Cognitive - Quiz 3 Evaluasi Tengah Semester Mid-term examination Kognitif - UTS | Cognitive -Midterm Exam 3.5% 25% 4 Kuis 2 Quiz 2 Kognitif - Quiz | Cognitive - Quiz 10% 5 Evaluasi Akhir Semester Final Examination Kognitif - UAS | Cognitive - Final TOTAL 15% 15% 20% 25% 25%

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Eri Naharani Ustazah



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List of Curriculum

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List of Curriculum

Courses

ASSESSMENT

A Evaluation Entry Scoring Recap

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Course Details

SF184103

Course Form Course Type Minimum Passing Grade

Physics 1 3 credits : Mata Kuliah Bersama

Coordinator: Dr. Sri Yani Purwaningsih, S.Si., M.Si.

Pada mata kuliah ini mahasiswa akan belajar memahami hukum-hukum dasar fisika, mekanika, panas, bunyi, cahaya, dan arus listrik

In this course, students will learn to understand the basic laws of physics, mechanics, heat, sound, light and electric current

LO CLO Assessment & Evaluation Plan Lesson Plan

esson Plan		
Weeknum	Course Material	Learning Method
1	Pendahuluan, kesetimbangan Introduction, equilibrium	Non SCL
2	Pusat massa Center of mass	Metode SCL lainnya
3	Konsep energi Concept of energy	Metode SCL lainnya
4	Fluida dinamis Fluid dynamics	Metode SCL lainnya
5	Panas, hubungan panas dan perubahan temperatur; Hubungan perubahan temperatur dan ukuran benda dan Quiz 1 Heat; the relation of heat and change of temperature; the relation of temperature change and size of the object and quiz 1	Non SCL
6	Kapasitas panas Heat capacity	Non SCL
7	Perpindahan panas Heat transfer	Non SCL
8	Evaluasi tengah semester Mid-term examination	Metode SCL lainnya
9	Getaran selaras/harmonik sederhana Simple harmonic motion	Non SCL
10	Refleksi dan transmisi gelombang Reflection and transmission of wave	Metode SCL lainnya
11	Sifat dan sumber cahaya Properties of light; Source of light	Non SCL
12	Intensitas cahaya; fluks cahaya Intensity of light; flux light and quiz 2	Non SCL
13	Hukum ohm; arus searah Ohm's law; direct current	Non SCL
14	Arus bolak-balik Alternating current	Non SCL
15	Evaluasi akhir semester Final examination	Metode SCL lainnya
16	Evaluasi akhir semester Final examination	Metode SCL lainnya

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## Civics DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



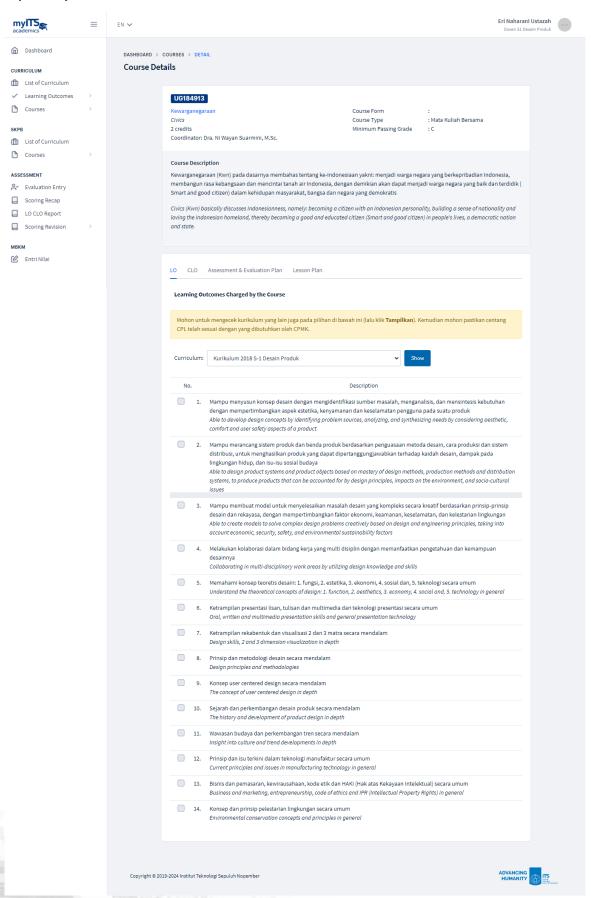
## <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

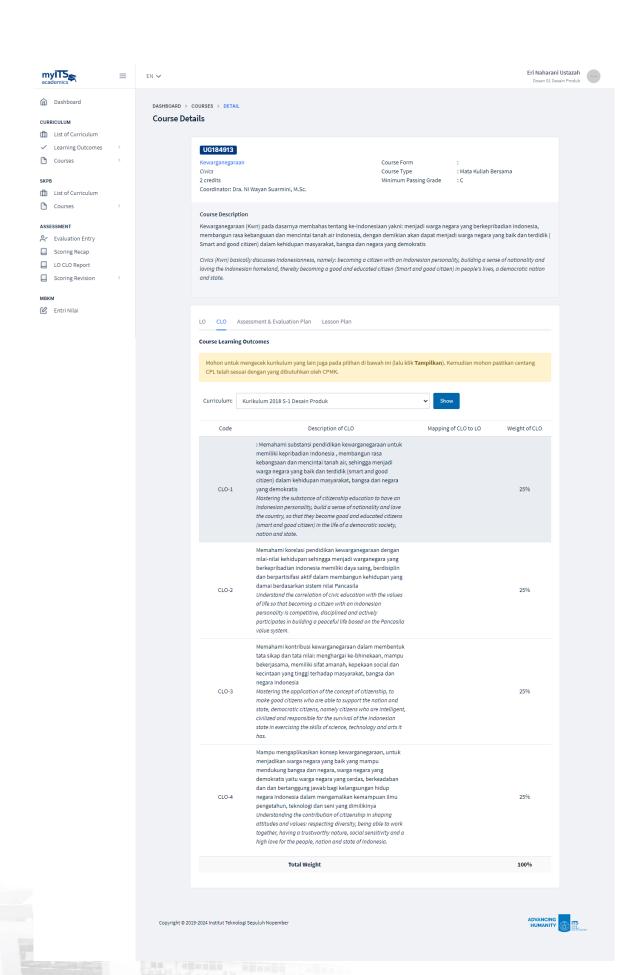
Course unit title	Civics
Course unit code	UG184913
Type of course unit	Compulsory-National
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	1 <sup>st</sup> year
Semester/trimester when the course unit is delivered	1 <sup>st</sup> semester
Number of ECTS credits allocated	3,2 ECTS credits
Name of lecturer	Dra. Ni Wayan Suarmini, M.Sc.
Learning outcomes of the course unit	<ol> <li>Students master the substance of citizenship education to have an Indonesian personality, build a sense of nationality and love the country so that students become good and educated citizens (smart and good citizen) in the life of a democratic society, nation, and state.</li> <li>Students understand the correlation of civic education with the values of life so that becoming a citizen with an Indonesian personality is competitive, disciplined and actively participates in building a peaceful life based on the Pancasila value system.</li> <li>Students master the application of the concept of citizenship, to make good citizens who are able to support the nation and state, democratic citizens, namely citizens who are intelligent, civilized and responsible for the survival of the Indonesian state in exercising the skills of science, technology and arts they have.</li> <li>Students understand the contribution of citizenship in shaping attitudes and values: respecting diversity, being able to work together, having a trustworthy nature, social sensitivity and a high love for the people, nation and state of Indonesia.</li> </ol>
Mode of delivery (face-to-face, distance learning)	face-to-face

Prerequisites and co-requisites	
Course content	<ol> <li>The nature and challenges of KWN</li> <li>State: Constitution and Democracy</li> <li>Law Enforcement: Rights and Obligations of Citizens, Legal Certainty and Justice</li> <li>National Identity and Integration</li> <li>Archipelagic Insight and Regional Autonomy</li> <li>National Resilience and State Defense</li> <li>Anti-Corrupotion Education</li> </ol>
Recommended or required reading and other learning resources/tools	<ol> <li>Kemenristekdikti. 2016. Modul Pendidikan Kewarganegaraan Untuk Perguruan Tinggi. Jakarta: Dirjen Belmawa Kemenristekdikti</li> <li>Armaidy Armawi, Geostrategi Indonesia, Jakarta, Direktorat jenderal Pendidikan Tinggi, 2006</li> <li>Azyumardi Azra, Paradigma Baru Pendidikan Nasional dan Rekrontruksi dan Demokratisasi, Penerbit Kompas, Jakarta, 2002</li> <li>Bahar, Dr. Saefrodin, Konteks Kenegaraan, Hak Asasi Manusia, Pustaka Sinar Harapan, Jakarta, 2000.</li> <li>Kaelan, Pendidikan Kewarganegaraan, UGM Press, Yogyakarta 2005.</li> <li>Slamet Soemiarno, Geopolitik Indonesia, Jakarta, Direktorat Jenderal Pendidikan Tinggi, 2006</li> </ol>
Planned learning activities and teaching methods	Problem-Based Learning
Language of instruction	Indonesian and English
Assessment methods and criteria	Assignment, Group Project, Quiz, Midterm Exam and Final Exam

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List of Curriculum

✓ Learning Outcomes > Courses

List of Curriculum

Courses

ASSESSMENT

A Evaluation Entry

Scoring Recap ☐ LO CLO Report

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DASHBOARD > COURSES > DETAIL

Course Details

UG184913

Kewarganegaraan

Course Form Course Type Minimum Passing Grade

: Mata Kuliah Bersama

Kewarganegaraan (Kwn) pada dasarnya membahas tentang ke-Indonesiaan yakni: menjadi warga negara yang berkepribadian Indonesia, membangun rasa kebangsaan dan mencintai tanah air Indonesia, dengan demikian akan dapat menjadi warga negara yang baik dan terdidik ( Smart and good citizen) dalam kehidupan masyarakat, bangsa dan negara yang demokratis

 $Civics \textit{(Kwn)} \textit{ basically discusses Indonesianness, namely: becoming a \textit{ citizen with an Indonesian personality, building a sense of nationality and a citizen with an Indonesian personality, building a sense of nationality and a citizen with an Indonesian personality, building a sense of nationality and a citizen with an Indonesian personality, building a sense of nationality and a citizen with an Indonesian personality, building a sense of nationality and a citizen with an Indonesian personality, building a sense of nationality and a citizen with an Indonesian personality, building a sense of nationality and a citizen with an Indonesian personality, building a sense of nationality and a citizen with an Indonesian personality, building a sense of nationality and a citizen with an Indonesian personality, building a sense of nationality and a citizen with an Indonesian personality and a citizen with a ci$ loving the Indonesian homeland, thereby becoming a good and educated citizen (Smart and good citizen) in people's lives, a democratic nation and state.

LO CLO Assessment & Evaluation Plan Lesson Plan

Coordinator: Dra. Ni Wayan Suarmini, M.Sc.

No.	Evaluation Plan	CLO-1	CLO-2	CLO-3	CLO-4	Total Weight
1	Keaktifan Student Activity Kognitif - Tugas   Cognitive - Assignment	5%	0%	5%	096	10%
2	Tugas 1 Assignment 1 Studi Kasus   Case Method	10%	0%	5%	096	15%
3	Evaluasi Tengah Semester Mid Term Kognitif - UTS   Cognitive - Midterm Exam	10%	0%	5%	096	15%
4	Tugas 2 Assignment 2 Studi Kasus   Case Method	0%	1096	0%	5%	15%
5	Tugas 3 Assignment 3 Hasil proyek   Team-based Project	0%	1096	0%	15%	25%
6	Evaluasi Akhir Semester Final Exam Kognitif - UAS   Cognitive - Final Exam	0%	5%	10%	5%	20%
	TOTAL Taraet	25% 25%	25% 25%	<b>25%</b>	<b>25%</b> 25%	100% 100%

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#### CURRICULUM

List of Curriculum ✓ Learning Outcomes >

Courses

List of Curriculum

Courses

#### ASSESSMENT

A Evaluation Entry

Scoring Recap LO CLO Report

Scoring Revision

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DASHBOARD > COURSES > DETAIL

### Course Details

## UG184913

Course Form Course Type Minimum Passing Grade Kewarganegaraan : Mata Kuliah Bersama

Coordinator: Dra. Ni Wayan Suarmini, M.Sc.

### Course Description

Kewarganegaraan (Kwn) pada dasarnya membahas tentang ke-Indonesiaan yakni: menjadi warga negara yang berkepribadian Indonesia, membangun rasa kebangsaan dan mencintal tanah air Indonesia, dengan demikian akan dapat menjadi warga negara yang baik dan terdidik ( Smart and good citizen) dalam kehidupan masyarakat, bangsa dan negara yang demokratis

Civics (Kwn) basically discusses indonesianness, namely: becoming a citizen with an Indonesian personality, building a sense of nationality and loving the Indonesian homeland, thereby becoming a good and educated citizen (Smart and good citizen) in people's lives, a democratic nation and state.

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LO	CLO	Assessment	& Evaluation	i Plan	Lesson Plan

esson Plan		
Weeknum	Course Material	Learning Method
1	Hakekat dan Tantangan KWN untuk masa depan bangsa The essence and challenges of Civic	Non SCL
2	Negara, Konstitusi dan Demokrasi Nation, Constitution and Democracy: History and it is Implementation	Case method
3	Lembaga dan hubungan antar lembaga negara pemerintahan negara dan Sistem pemerintahan daerah. Institutions and relationships between state government agencies and local government systems.	Non SCL
4	Hakikat demokrasi sebagai sistem nilai dan sistem politik, partai politik, pemilu dan sistem perwakilan, pendidikan demokrasi - The essence of democracy as a value system and political system, political parties, elections and representative systems, democratic education	Case method
5	Penegakan Hukum yang berkeadilan Law enforcement	Non SCL
6	Hak Dan Kewajiban Negara dan Warga Negara Rights and obligations of the Citizens	Non SCL
7	Dinamika, Tantangan hak dan kewajiban Negara Dan Warga Negara Dynamics and Challenges of the rights and obligations of Citizens	Case method
8	Evaluasi Tengah Semester Mid Term	Metode SCL lainnya
9	Identitas nasional sebagai salah satu determinan pembangunan bangsa dan karakter bangsa National Identity as one of the determinants of national development and national character	Non SCL
10	Wawasan Nusantara Wawasan Nusantara	Non SCL
11	Otonomi Daerah Regional Autonomy	Team-based project
12	Anti-Korupsi Anti-corruption	Non SCL
13	Ketahanan nasional dan bela negara National resilience and state defense	Non SCL
14	Globalisasi dan Tantangan Masa Depan Globalization and It is Challenges	Team-based project
15	Review Materi Material Review	Non SCL
16	Evaluasi Akhir Semester Final Exam	Metode SCL lainnya





## English DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



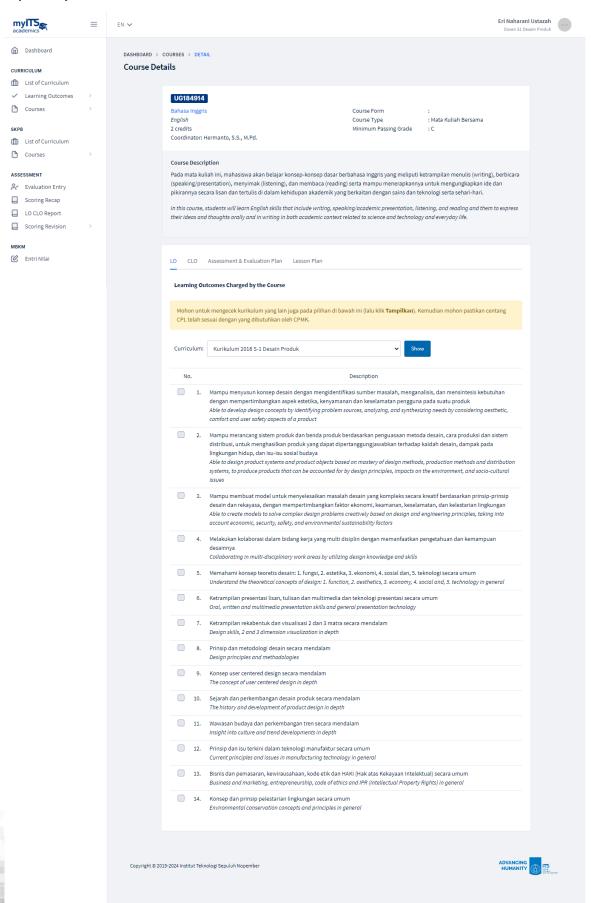
## <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

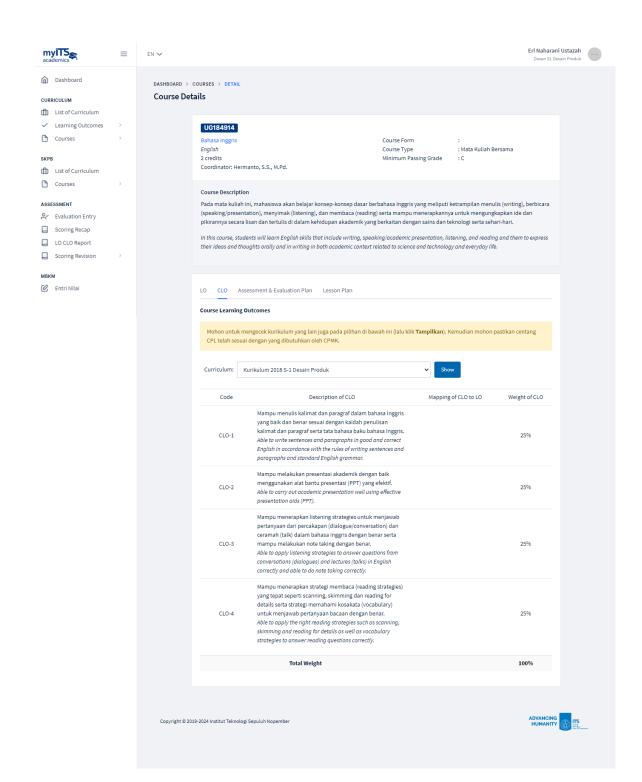
Course unit title	English
Course unit code	UG184914
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	1 <sup>st</sup> year
Semester/trimester when the course unit is delivered	1 <sup>st</sup> semester
Number of ECTS credits allocated	3,2 ECTS credits
Name of lecturer	Hermanto, S.S., M.Pd.
Learning outcomes of the course unit	<ol> <li>Able to write sentences and paragraphs in good and correct English in accordance with the rules of writing sentences and paragraphs and standard English grammar.</li> <li>Able to carry out academic presentation well using effective presentation aids (PPT).</li> <li>Able to apply listening strategies to answer questions from conversations (dialogues) and lectures (talks) in English correctly and able to do note taking correctly.</li> <li>Able to apply the right reading strategies such as scanning, skimming, and reading for details as well as vocabulary strategies to answer reading questions correctly.</li> </ol>
Mode of delivery (face-to-face, distance learning)	face-to-face
Prerequisites and co-requisites	
Course content	<ol> <li>Subject – Verb Agreement</li> <li>Phrases and clauses</li> <li>Sentence types</li> <li>Paragraph</li> <li>Academic presentation</li> <li>Listening to short conversation</li> <li>Listening to longer conversation</li> <li>Listening to talks and note taking</li> <li>Reading strategies</li> <li>Vocabulary recognition</li> <li>Reading for details:</li> <li>Text pattern organizations</li> </ol>

Recommended or required	1. Tim Dosen Bahasa Inggris ITS, Improving English
reading and other learning	Skills for Academic Purposes, A Conceptual and
resources/tools	Practical Integration
	2. Becker Lucinda & Joan Van Emden, Presentation
	Skills for Students, Palgrave, Macmillan, 2010
	3. Hogue Ann, Oshima Alice, Introduction to Academic
	Writing, Longman,1997
	4. Johnston Susan S, Zukowski Jean/Faust, Steps to
	Academic Reading, Heinle, Canada, 2002
	5. Mikulecky, Beatrice S, Advanced Reading Power,
	Pearson Education, New York, 2007
	6. Preiss Sherry, NorthStar: Listening and Speaking,
	Pearson Education, New York 2009
Planned learning activities and	Problem-Based Learning
teaching methods	
Language of instruction	English
Assessment methods and	Assignment, Quiz, Midterm Exam and Final Exam
criteria	

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Course Description

ASSESSMENT

MBKM

Entri Nilai

Scoring Recap

LO CLO Report
Scoring Revision

Pada mata kuliah ini, mahasiswa akan belajar konsep-konsep dasar berbahasa Inggris yang meliputi ketrampilan menulis (writing), berbicara (speaking/presentation), menyimak (listening), dan membaca (reading) serta mampu menerapkannya untuk mengungkapkan ide dan pikirannya secara lisan dan tertulis di dalam kehidupan akademik yang berkaitan dengan sains dan teknologi serta sehari-hari.

In this course, students will learn English skills that include writing, speaking/academic presentation, listening, and reading and them to express their ideas and thoughts orally and in writing in both academic context related to science and technology and everyday life.

LO CLO Assessment & Evaluation Plan Lesson Plan Assessment & Evaluation Plan CLO-1 No. Evaluation Plan CLO-3 CLO-4 Weight 1 Tugas Studi Kasus | Case Method Kognitif - Quiz | Cognitive - Quiz Hasil proyek | Team-based Project EAS Final Exam 15% 15% Kognitif - UAS | Cognitive - Final Exam TOTAL

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Eri Naharani Ustazah

esson Plan		
Weeknum	Course Material	Learning Method
1	Mampu mengidentifikasi dan menentukan Subject - Verb kalimat dan membuat kalimat dengan Subject - Verb dengan benar. Able to identify and define the Subject - Verb of the sentences and create sentences with Subject - Verb correctly:	Case method
2	Mampu membedakan antara phrase dan clause, main clause dan sub-clause, serta membuat main clause dan sub-clause terpadu dalam kallmat. Able to distinguish between phrase and clause, main clause and sub-clause, and make main clause and sub-clause integrated in semence.	Case method
3	Mampu menulis berbagai jenis kalimat (sentence types: simple sentence, compound sentence, complex sentence, dan compound complex sentence) Able to write various types of sentences (simple sentence, compound sentence, complex sentence, and compound complex sentence, and	Metode SCL lainnya
4	Mampu menulis paragraph beserta unsur-unsur yang membentuknya (topic sentence, supporting sentences, dan concluding sentences) serta mengikuti kaidah paragraph unity and coherence dengan benar. Able to write paragraphs and the elements that form them (topic sentence, supporting sentences, and concluding sentences) and foliout the rules of paragraph unity and coherence correctly.	Metode SCL lainnya
5	Mampu menjelaskan faktor-faktor yang membuat presentasi menjadi baik atau jelek dan mempersiapkan materi presentasi. Able to explain the factors that make a presentation good or bad and prepare presentation materials.	Team-based project
6	Mampu melaksanakan presentasi akademik dengan baik menggunakan alat bantu (PPT) yang efektif secara berkelompok. Able to carry out ocademic presentations well by using effective presentation aids (PPT) in groups.	Team-based project
7	Mampu melaksanakan presentasi akademik dengan baik menggunakan alat bantu (PPT) yang efektif secara berkelompok. Able to carry out academic presentations well by using effective presentation aids (PPT) in groups.	Team-based project
8	Mampu melaksanakan presentasi akademik dengan balk menggunakan alat bantu (PPT) yang efektif secara berkelompok. Able to carry out acodemic presentations well by using effective presentation aids (PPT) in groups.	Team-based project
9	Mampu menjelaskan dan menjawab isi wacana lisan dari short conversation Able to explain and answer the content of oral discourse from short conversations.	Metode SCL lainnya
10	Mampu menjelaskan dan menjawab isi wacana lisan dari longer conversation Able to explain and answer the content of oral discourse from longer conversations.	Metode SCL lainnya
11	Mampu menjelaskan dan menjawab isi wacana lisan dari talki serta mampu melakukan note taking dengan henar.  Able to explain and answer the content of oral discourse of talks and able to do note taking well.	Metode SCL lainnya
12	Mampu menerapkan strategi membaca skimming dan scanning untuk memahami Isi wacana tulls serta mampu menggunakan strategi Vocabulary recognition dalam memahami arti kosa kata. Able to apply skimming and scanning reading strategies to understand the content of written discourse and able to use Vocabulary recognition strategy in understanding the meaning of vocabulary.	Metode SCL lainnya
13	Mampu menggunakan strategi Reading for details untuk memahami main ideas, stated detail information, unstated detail information, serta implied information untuk menjelaskan isi wacana tuils. Able to use the strategy of Reading for details to understand main ideas, stated detail information, unstated detail information, and implied information to explain the content of the written discourse.	Metode SCL lainnya
14	Mampu menjelaskan struktur organisasi bacaan (text pattern organizations) dengan mengidentifikasi key words dan signal words yang digunakan. Able to explain the structure of redding organizations (text pattern organizations) by identifying the key words and the signal words used.	Metode SCL lainnya
15	Mampu membuat inferensi, parafrase (paraphrasing) dan ringkasan (summarizing). Able to make inference, paraphrase and summary.	Metode SCL lainnya
	Evaluasi Akhir Semester	Metode SCL lainnya

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### Religious Studies DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023

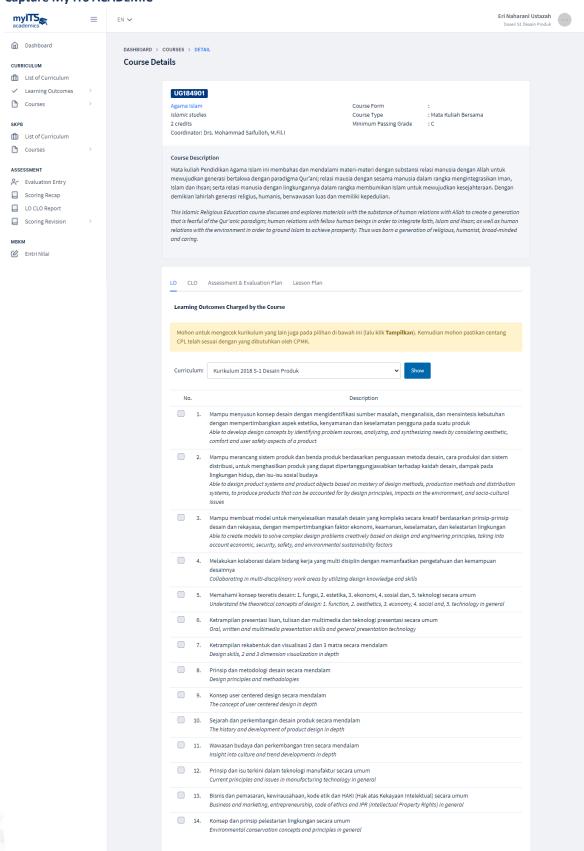
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

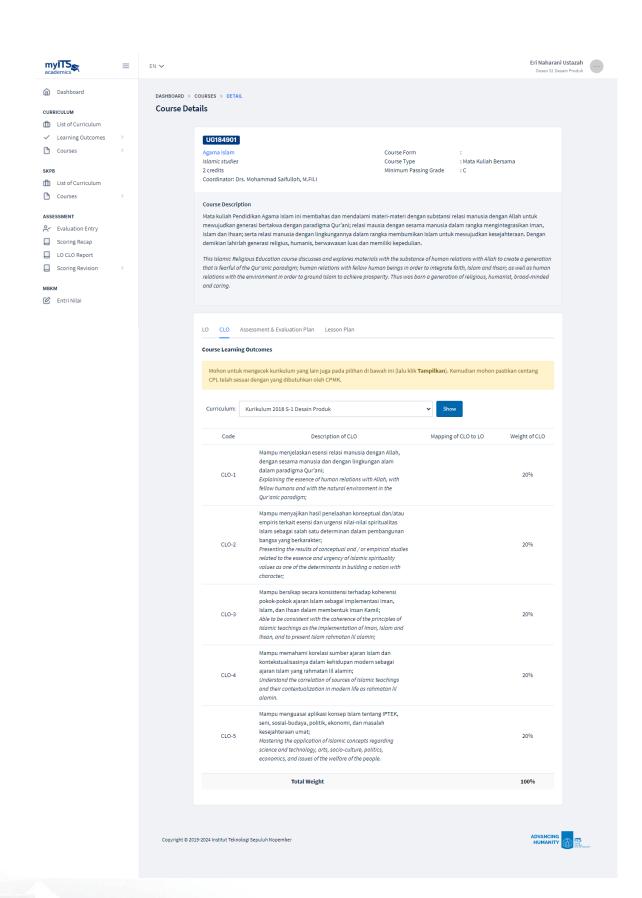
Course unit title	Islamic Religious Education		
Course unit code	UG184901/UG181901/UG18901		
Type of course unit	Compulsory		
Level of course unit	First cycle Bachelor		
Year of study when the course unit is delivered	1 <sup>st</sup> year		
Semester/trimester when the course unit is delivered	1 <sup>st</sup> semester		
Number of ECTS credits allocated	3,2 ECTS credits		
Name of lecturer	Drs. Mohammad Saifulloh, M.Fil.I		
Learning outcomes of the course unit  Mode of delivery (face-to-face, distance learning)	<ol> <li>Believe in God Almighty and able to show a religious attitude</li> <li>Upholding human values in carrying out duties based on religion, morals and ethics</li> <li>Internalizing values, norms, and academic attitude</li> <li>Able to apply logical, critical, systematic, and innovative thinking in the context of developing or implementing science and technology that pays attention to and applies humanities values in accordance with their field of expertise</li> <li>Able to show independent, quality, and measurable performance</li> <li>Able to make decisions appropriately in the context of problem solving in their area of expertise, based on the results of information and data analysis</li> <li>Able to implement the principles of sustainability in developing knowledge</li> <li>face-to-face</li> </ol>		
Prerequisites and co-requisites	-		
Course content	<ol> <li>Building a Qur'anic Paradigm</li> <li>How humans acknowledge the existence of God</li> <li>Integration of Faith, Islam and Ihsan</li> <li>How Religion Ensures Happiness</li> <li>Grounding Islam in Indonesia</li> <li>Religious Moderation in Islam (Deradicalization)</li> <li>Islam Builds Unity in Diversity</li> <li>Zakat, Sadaqah, and Taxes (Islamic Philanthropy)</li> <li>The Role and Function of a Mosque for the Welfare of the Ummah</li> </ol>		

Recommended or required reading and other learning resources/tools	<ol> <li>Islam Faces the Challenge of Modernization (Islam and Science and Technology)</li> <li>Contribution of Islam in the Development of World Civilization</li> <li>Wahyuddin, dkk., Pendidikan Agama Islam Membangun Karakter Mahasiswa di Perguruan Tinggi, Surabaya, Penerbit Litera Jannata Perkasa, 2019.</li> <li>Dirjen Pembelajaran dan Kemahasiswaan Kemenristekdikti, Pendidikan Agama Islam untuk Perguruan Tinggi, Jakarta, Dirjen Belmawa, 2016.</li> <li>Muhibbin, Zainul, dkk, Pendidikan Agama Islam Membangun Karakter Madani, Surabaya, ITS Press, 2012.</li> <li>Razaq, Nasruddin, Dinnul Islam, Bandung, Al-Ma,arif, 2005.</li> <li>Iberani, Jamal Syarif dkk, Mengenal Islam, Jakarta: eL-Kahfi, 2003.</li> <li>Imarah, Muhammad, Islam dan Pluralitas Perbedaan dan Kemajemukan dalam Bingkai</li> </ol>		
Di 11 : 0 70	Persatuan, Jakarta, Gema Insani, 1999.		
Planned learning activities and teaching methods	Problem-Based Learning		
Language of instruction	Indonesian and English		
Assessment methods and criteria	Assignment, Group Project, Quiz, Midterm Exam and Final Exam		

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Course Details

List of Curriculum

Learning Outcomes

Courses

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Agama Isi

List of Curriculum
Courses

ASSESSMENT

Properties

Availation Entry

Scoring Recap

LO CLO Report

MBKM

Entri Nilai

UG184901

Agama Islam Course Form : Islamic studies Course Type : Mata Kullah Bersama 2 credits Minimum Passing Grade : C

#### Course Description

Mata kuliah Pendidikan Agama Islam ini membahas dan mendalami materi-materi dengan substansi relasi manusia dengan Allah untuk mewujudkan generasi bertakwa dengan paradigma Qurani; relasi mausia dengan sesama manusia dalam rangka mengintegrasikan iman, Islam dan Ihsan, setra relasi manusia dengan lingkungannya dalam rangka membumikan Islam untuk mewujudkan kesejahteraan. Dengan demikian lahirlah generasi religius, humanis, berwawasan luas dan memiliki kepedulian.

This Islamic Religious Education course discusses and explores materials with the substance of human relations with Allah to create a generation that is fearful of the Qur'anic paradigm; human relations with fellow human beings in order to integrate faith, Islam and Ihsan; as well as human relations with the environment in order to ground Islam to achieve prosperity. Thus was born a generation of religious, humanist, broad-minded and caring.

ssessment & Evaluation Plan							
No.	Evaluation Plan	CLO-1	CLO-2	CLO-3	CLO-4	CLO-5	Total Weight
1	Tugas 1 Al Qur'an Task 1 Al Qur'an Studi Kasus   Case Method	10%	096	596	5%	5%	25%
2	Tugas 2 Makalah <i>Paper</i> Studi Kasus   <i>Case Method</i>	0%	10%	096	10%	5%	25%
3	UTS Midterm Exam Kognitif - UTS   Cognitive - Midterm Exam	5%	5%	10%	5%	0%	25%
4	UAS Final Exam Kognitif - UAS   Cognitive - Final Exam	5%	5%	5%	0%	10%	25%
	TOTAL Target	<b>20%</b>	<b>20%</b>	<b>20%</b> 20%	<b>20%</b> 20%	<b>20%</b>	100% 100%

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n Dashboard

CURRICULUM

List of Curriculum

✓ Learning Outcomes

List of Curriculum

Courses

Courses

ASSESSMENT

A Evaluation Entry Scoring Recap

LO CLO Report Scoring Revision

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DASHBOARD > COURSES > DETAIL

#### Course Details

UG184901

Islamic studies

Course Type Minimum Passing Grade

Coordinator: Drs. Mohammad Saifulloh, M.Fil.I

#### Course Description

Mata kuliah Pendidikan Agama Islam ini membahas dan mendalami materi-materi dengan substansi relasi manusia dengan Allah untuk mewujudkan generasi bertakwa dengan paradigma Qur'ani; relasi mausia dengan sesama manusia dalam rangka mengintegrasikan Iman, Islam dan Ihsan; serta relasi manusia dengan lingkungannya dalam rangka membumikan Islam untuk mewujudkan kesejahteraan. Dengan demikian lahirlah generasi religius, humanis, berwawasan luas dan memiliki kepedulian.

Course Form

: Mata Kuliah Bersama

This Islamic Religious Education course discusses and explores materials with the substance of human relations with Allah to create a generation that is fearful of the Qur'anic paradigm; human relations with fellow human beings in order to integrate faith, Islam and ihson; as well as human relations with the environment in order to ground Islam to achieve prosperity. Thus was born a generation of religious, humanist, broad-minded

LO CLO	Assessment & Evaluation Plan Lesson Plan	
Lesson Plan		
Weeknum	Course Material	Learning Method
1	Pendahuluan Introduction	Non SCL
2	Presentasi Hasil Tugas Membaca al-Qur'an Presentation on Reading The Qur'an	Case method
3	Fitrah Manusia Bertuhan Human Nature to Know God	Metode SCL lainnya
4	Membangun Paradigma Qur'ani Build a Quranic Paradigm	Metode SCL lainnya
5	Integrasi Iman, Islam dan Ihsan dalam Membentuk Insan Kamil Integration of Faith, Islam and Ihsan in Forming Insan Kamil	Metode SCL lainnya
6	Agama Menjamin Kebahagiaan Religion Guarantees Happinees	Metode SCL lainnya
7	Membumikan Islam di Indonesia Grounding Islam in Indonesia	Metode SCL lainnya
8	Evaluasi Tengah Semester Mid-Semester Evaluation	Non SCL
9	Presentasi Hasil Tugas Menghafal al-Qur'an Presentation on Memorizing the Qur'an	Case method
10	Moderasi Beragama Membangun Persatuan dalam Keberagamaan Religious Moderation Builds Unity in Religion	Case method
11	Efektivitas Pengelolahan Zakat dan Wakaf untuk Kemaslahatan Umat Effectiveness of Zakat and Waqf Management for the Benefit of the Ummah	Case method
12	Optimalisasi Peran dan Fungsi Masjid untuk kesejahteraan umat Optimizing the Role and Function of the Mosque for the welfore of the Ummah	Case method
13	Islam Menghadapi Tantangan Modernisasi (Islam dan IPTEKS) Islam Faces the Challenge of Modernization (Islam and Science and Technology)	Case method
14	Kontribusi Islam dalam Pengembangan Peradaban Dunia Contribution of Islam in the Development of World Civilization	Case method
15	Review Tugas Task review	Non SCL
16	Evaluasi Akhir Semester End of Semester Evaluation	Non SCL

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### **2nd SEMESTER**

Bachelor of Industrial Design (BOID)





### Design Basics 2 DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



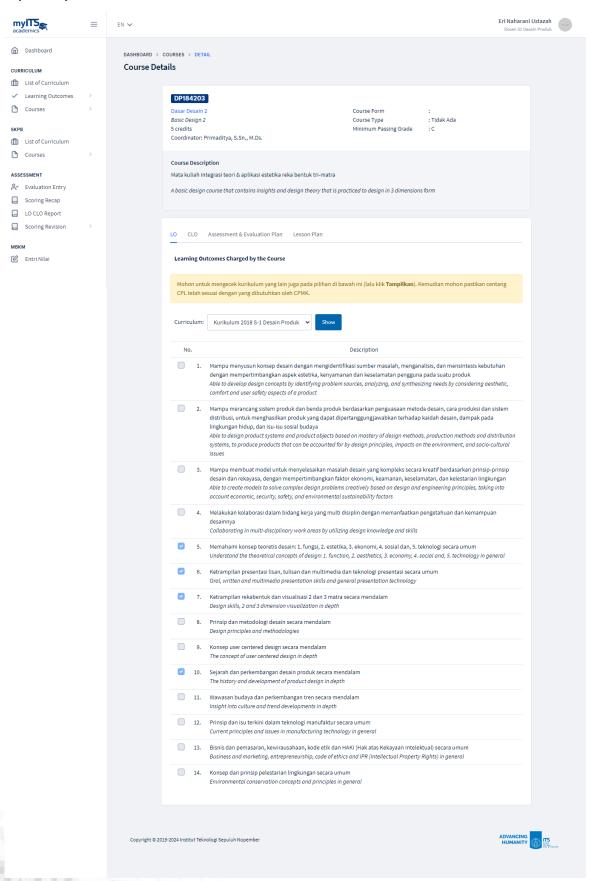
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

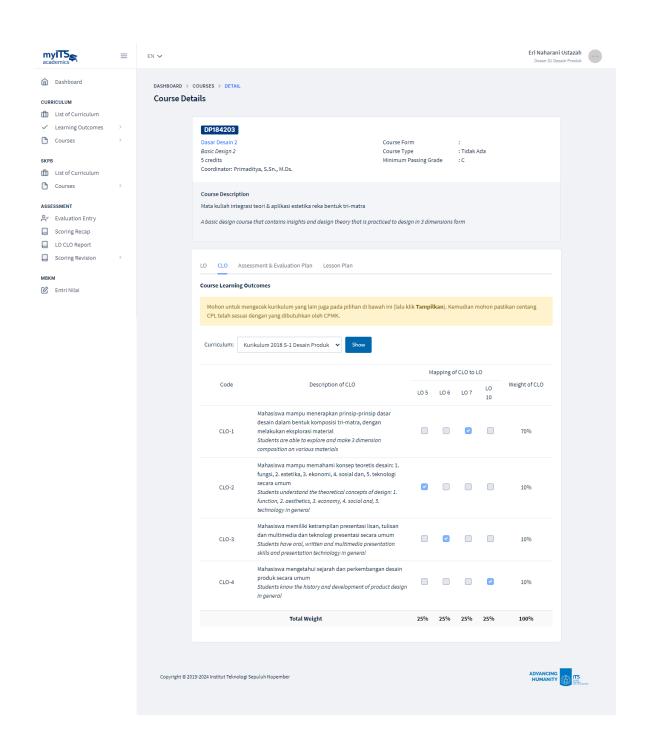
Course unit title	Design Basics 2
Course unit code	DP184203
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	1 <sup>st</sup> year
Semester/trimester when the course unit is delivered	2 <sup>nd</sup> semester
Number of ECTS credits allocated	8 ECTS Credits
Name of lecturer	Primaditya, S.Sn., M.Ds.
Learning outcomes of the course unit  Mode of delivery	<ol> <li>Students are able to explore and make 3 dimension composition on various materials</li> <li>Students understand the theoretical concepts of design: 1. function, 2. aesthetics, 3. economy, 4. social and, 5. technology in general</li> <li>Students have oral, written and multimedia presentation skills and presentation technology in general</li> <li>Students know the history and development of product design in general</li> </ol>
Prerequisites and co-requisites	-
Course content	The Design Basics 2 is a course delivered in the second semester, a core subject alongside Drawing 2. It is an integrated course combining theory and practical exercises in the aesthetics of tri-matrix design, serving as the foundation for new students in preparation for advanced design courses in subsequent levels.
	1) Visual design element of texture 2) Visual design element of space 3) Visual design element of depth 4) Visual design principle of repetition 5) Visual design principle of variation 6) Visual design principle of balance

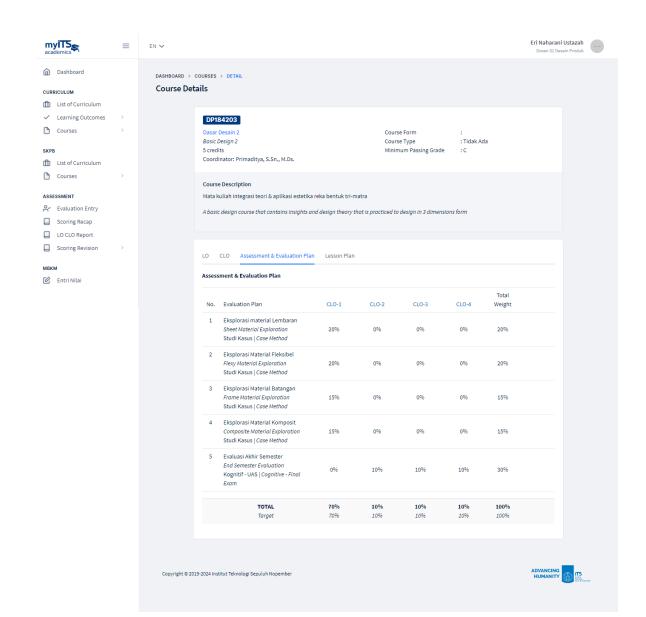
	7) Visual design principle of proportion 8) Visual design principle of harmony 9) Structure & material 10) Exploration of sheet materials 11) Exploration of rod materials 12) Exploration of plastic materials 13) Exploration of solid materials
Recommended or required reading and other learning resources/tools	<ul> <li>Bielefeld, Basic Design Ideas, Boston, Springer, 2007</li> <li>Lidwell, William, Universal Principles of Design, USA: Rockport Publishers, 2003</li> <li>Lawson, Bryan, How Designers Think, London, The Architectural Press Ltd</li> <li>Williams, Christopher, Origin Form, New York, Architectural Book Publishing Company, 1981</li> </ul>
Planned learning activities and teaching methods	Discovery Learning; Case Study
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

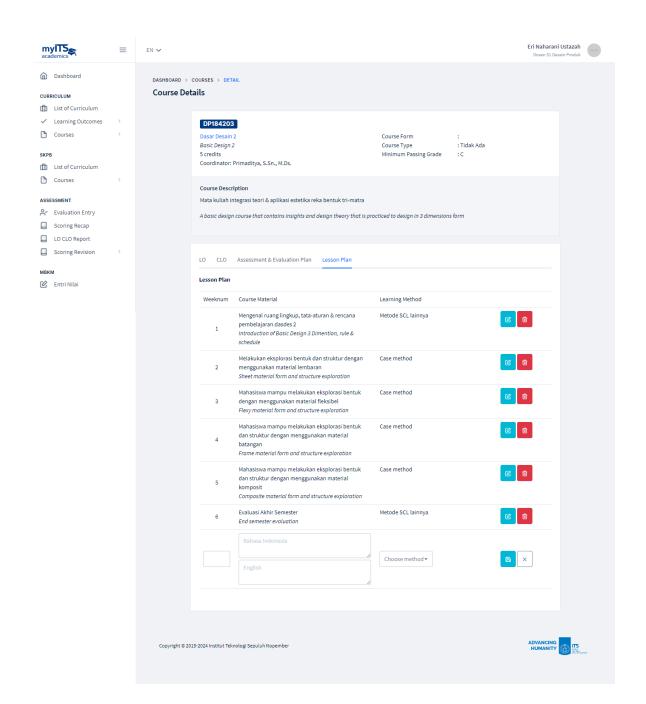
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## Drawing 2 DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023

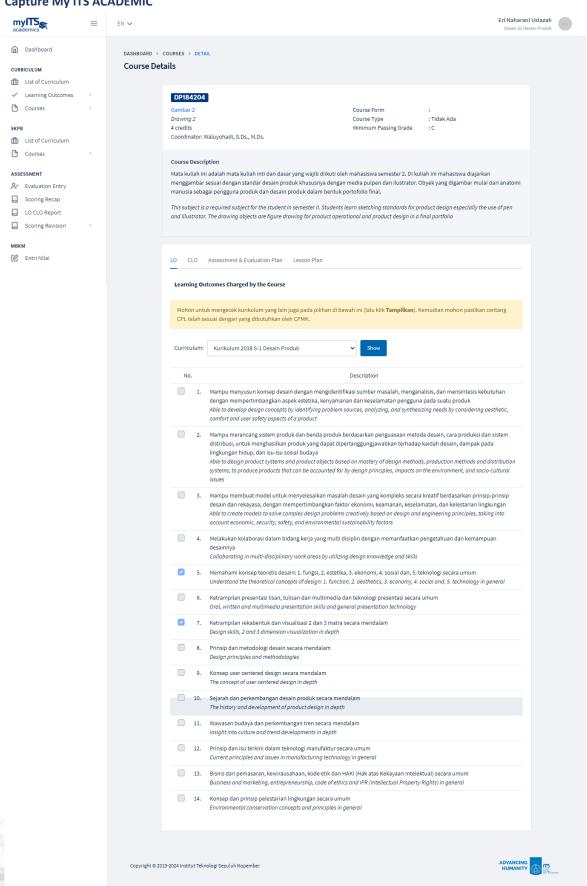
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

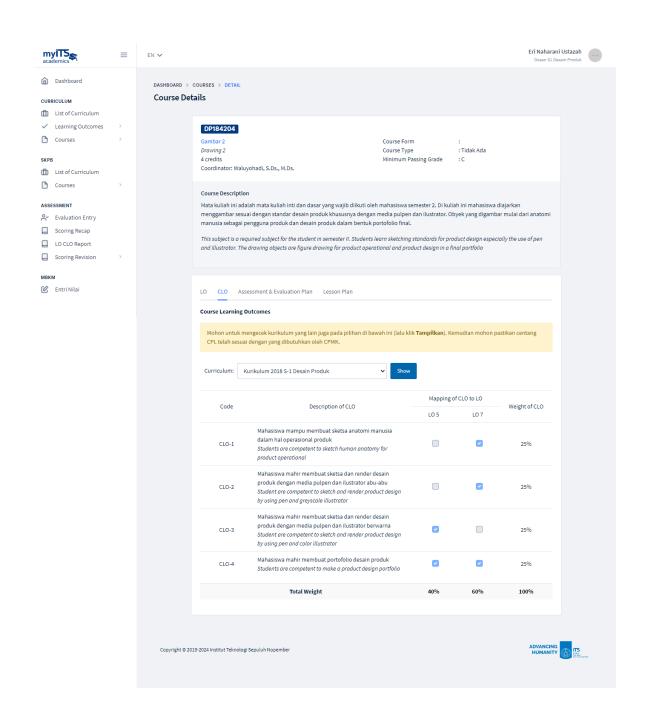
Course unit title	Drawing 2
Course unit code	DP184204
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	1 <sup>st</sup> year
Semester/trimester when the course unit is delivered	2 <sup>nd</sup> semester
Number of ECTS credits allocated	6,4 ECTS Credits
Name of lecturer	Waluyohadi, S.Ds., M.Ds.
Learning outcomes of the course unit	<ol> <li>Students are competent to sketch human anatomy for product operational</li> <li>Student are competent to sketch and render product design by using pen and greyscale illustrator</li> <li>Student are competent to sketch and render product design by using pen and color illustrator</li> <li>Students are competent to make a product design portfolio</li> </ol>
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	This course is a core and fundamental subject mandatory for second-semester students. In this course, students are taught drawing in accordance with product design standards, particularly using a pen as the medium.  1) Design as thinking tools 2) Pen medium 3) Organic products 4) Geometric products 5) Appliance products 6) Furniture products 7) Interior products 8) Exterior products 9) Architectural products

Recommended or required reading and other learning resources/tools	<ul> <li>Pipes, Alan, "Drawing for Designer", Laurence King Publishers, 2007</li> <li>Erik Olofsson &amp; Klara Sjölén, "Design Sketching", KEEOS Design Books, Sweden, 2005</li> <li>Eissen, Koos, &amp; Steur, Roselien, "Sketching: Drawing Technique for Product Designer", Bis Publisher, 2009</li> <li>Powell, Dick, "Presentation Techniques: A Guide to Drawing and Presenting Design Ideas", Little, Brown, 1990</li> <li>Waluyohadi, "Gambar Bentuk dan Suasana", Butawarna Publishing, 2015</li> </ul>
Planned learning activities and teaching methods	Discovery Learning; Case Method
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

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Courses

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Scoring Recap

LO CLO Report
Scoring Revision

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DASHBOARD > COURSES > DETAIL

Course Details

DP184204

 Gambar 2
 Course Form
 :

 Drawing 2
 Course Type
 : Tidak Ada

 4 credits
 Minimum Passing Grade
 : C

 Coordinator: Waluyohadi, S.Ds., M.Ds.
 : C

Course Description

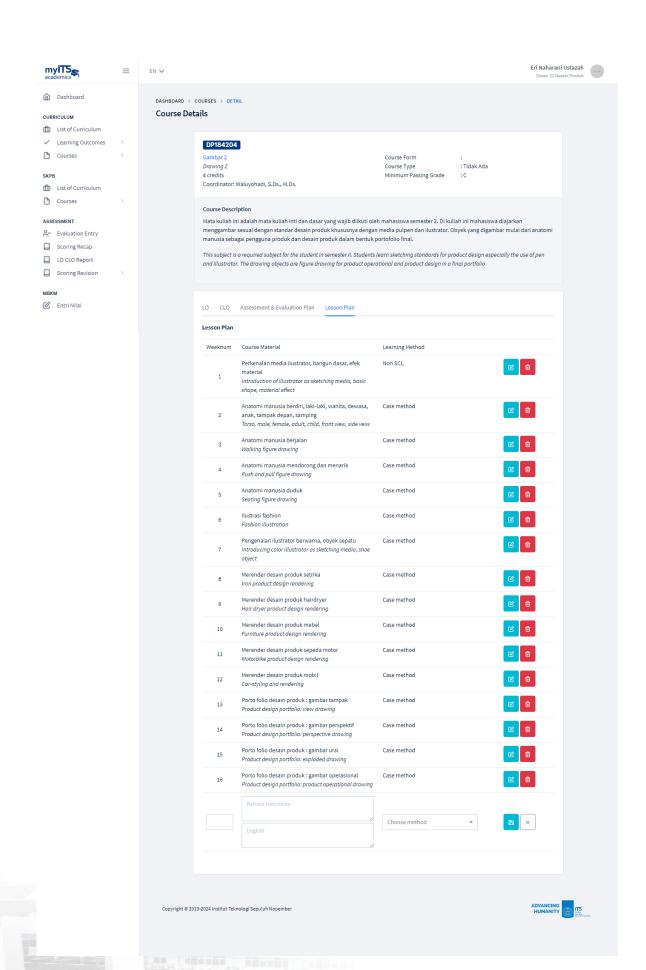
Mata kullah ini adalah mata kuliah init dan dasar yang wajib diikuti oleh mahasiswa semester 2. Di kuliah ini mahasiswa diajarkan menggambar sesuai dengan standar desain produk khususnya dengan media pulpen dan ilustrator. Obyek yang digambar mulai dari anatomi manusia sebagai pengguna produk dan desain produk dalam bentuk portofolio final.

This subject is a required subject for the student in semester II. Students learn sketching standards for product design especially the use of pen and illustrator. The drawing objects are figure drawing for product operational and product design in a final portfolio

0	CLO A	ssessment & Evaluation Plan	Lesson Plan					
sses	ssessment & Evaluation Plan							
No.	Evaluati	on Plan	CLO-1	CLO-2	CLO-3	CLO-4	Total Weight	
1	Anatom Anatom Studi Ka		25%	0%	0%	0%	25%	
2	Mindern renderin	knik render hitam putih n exam : Greyscale Ig Isus   Case Method	096	25%	096	0%	25%	
3	Color re	- Tugas   Cognitive -	096	096	25%	096	25%	
4	Final ext Portfolio	ortofolio desain produk nam : Product Design o osus   Case Method	0%	0%	096	25%	25%	
		<b>TOTAL</b> Target	<b>25%</b> 25%	<b>25%</b> 25%	<b>25%</b> 25%	<b>25%</b> 25%	<b>100%</b> 10096	

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# Introduction to Built Environment DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

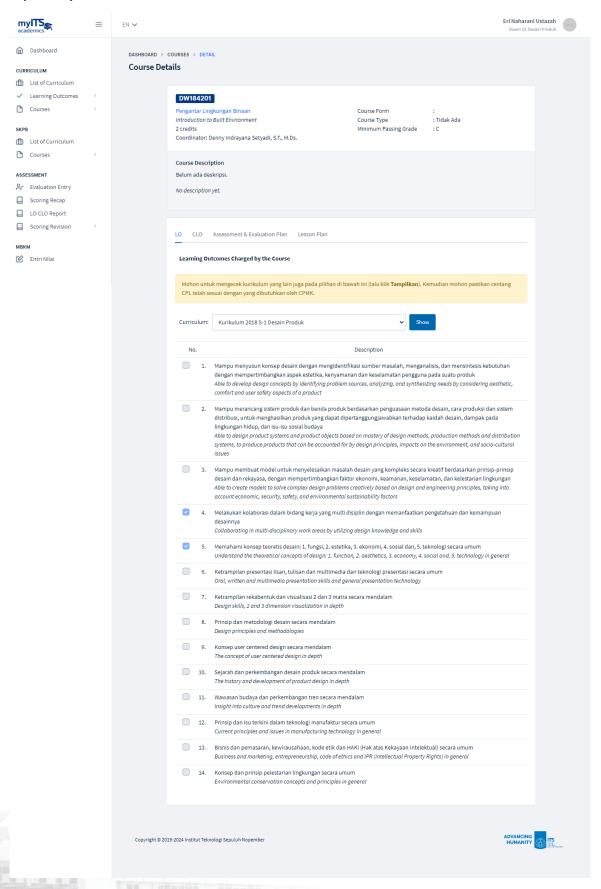
Course unit title	Introduction to Built Environment				
Course unit code	DI 184733				
Type of course unit	Compulsory				
Level of course unit	First Cycle Bachelor				
Year of study when the course unit is delivered	4 <sup>th</sup> year				
Semester/trimester when the course unit is delivered	7 <sup>th</sup>				
Number of ECTS credits allocated	4,8				
Name of lecturer	Lea Kristina Anggraeni, S.T., M.Ds. Dr. Ir. Susy Budi Astuti, M.T.				
Learning outcomes of the course unit	<ol> <li>Students understand the concept of behavior, built environment and sustainable design.</li> <li>Students are able to see the phenomena that occurs in Indonesia related to lifestyles and ecological issues.</li> <li>Students understand the relationship between lifestyle prevailing in society as the basic concept in designing interior and its aesthetic elements.</li> <li>Students understand and able to apply the process of design and sustainability management in designing the interior and its supporting elements.</li> <li>Students recognize, understand the characteristics of material, and are able to choose the right material to support the sustainable design.</li> <li>Students are able to create design as problem solver, which is visually attractive and environmentally friendly.</li> <li>Students are able to create research based on behavior, lifestyle and environmental ecological issues.</li> </ol>				
Mode of delivery	Face-to-Face				
Prerequisites and co-requisites	<ol> <li>Already take Course Study - Interior Design &amp; Culture</li> <li>Already take Course Study - Interior Design Research</li> <li>Already take Course Study - Behavior &amp; environment</li> <li>Already take Course Study - Interior Science</li> <li>Already take Course Study - Material &amp; Interior</li> </ol>				

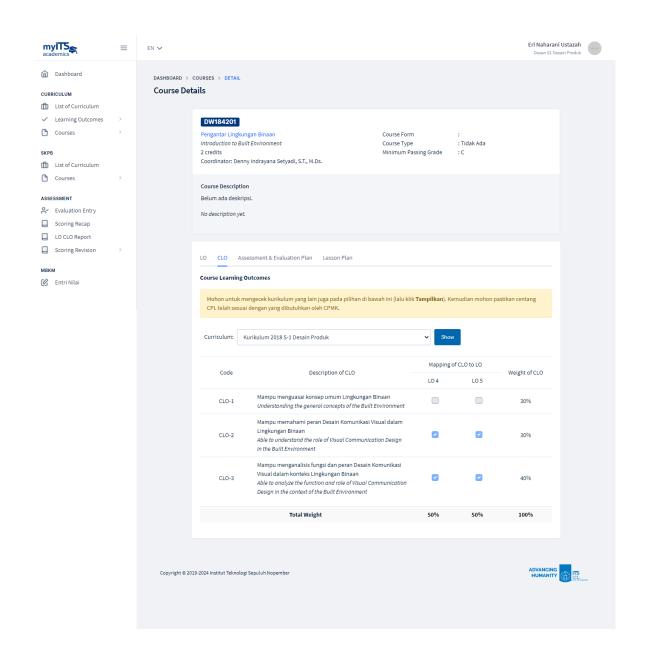
		application
		• •
		Already take Course Study - Ergonomic
Course content		Human behavior
		2. Lifestyle
		Environmental ecological issues
		Sustainable design
Recommended or required	1.	Obeidat, I., Obeidat, S., Rumman, S. A., & Al-
reading and other learning	'-	Jubouri, F. (2022). The role of sustainable interior
resources/tools		design and its impact on customer's behavior in
100001000/10010		Commercial Environments. <i>IOP Conference Series</i> :
		Earth and Environmental Science, 1026(1), 012054.
		https://doi.org/10.1088/1755-1315/1026/1/012054
	2.	Whiting, P., Cullen, V., Adkins, H., & Chatteur, F.
		(2023). A new retail interior design education
		paradigm for a circular economy. Sustainability,
		15(2), 1487. https://doi.org/10.3390/su15021487
	3.	Pacheco-Torgal, F., & Goran-Granqvist, C. (2023).
	Ŭ.	Adapting the built environment for climate change:
		Design principles for climate emergencies.
		Woodhead Publishing.
	4.	Obeidat, I. (2022). The effect of self-sufficiency in
		interior design and its reflection on user's behavior
		within built environments. Dirasat: Human and Social
		Sciences, 49(1), 428–457.
		https://doi.org/10.35516/hum.v49i1.1669
	5.	Araya León, M. J., Guasch, R., Estévez, A. T., &
		Peña, J. (2022). Interaction between the interior built
		environment and the human being. an integrative
		review in relation to perception, health, and well-
		being. Theoretical Issues in Ergonomics Science,
		<i>24</i> (6), 698–728.
		https://doi.org/10.1080/1463922x.2022.2134940
	6.	Kotradyova, V. (2019). Sustainability in interior
		design: Interdisciplinary research used for exploring
		relation between built environment and human. IOP
		Conference Series: Materials Science and
		Engineering, 603(4), 042100.
		https://doi.org/10.1088/1757-899x/603/4/042100
	7.	Hes, D., & Hernandez-Santin, C. (2019).
		Placemaking fundamentals for the built environment.
		Palgrave Macmillan.
	8.	Coles, R., Costa, S., & Watson, S. (2019). Pathways
		to well-being in design: Examples from the Arts,
		humanities and the built environment. Routledge,
		Taylor et Francis Group.
	9.	Seta, F., Biswas, A., Khare, A., & Sen, J. (2018).
		Understanding built environment proceedings of the
		National Conference on Sustainable Built
		Environment 2015. Springer Singapore.
		10. Briede, I., & Strode, A. (2020). Possibilities of
to the same of the		environmental sustainability in interior design.
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CONTRACT AND AND ADDRESS OF THE PARTY OF THE		Proceedings of the International Scientific

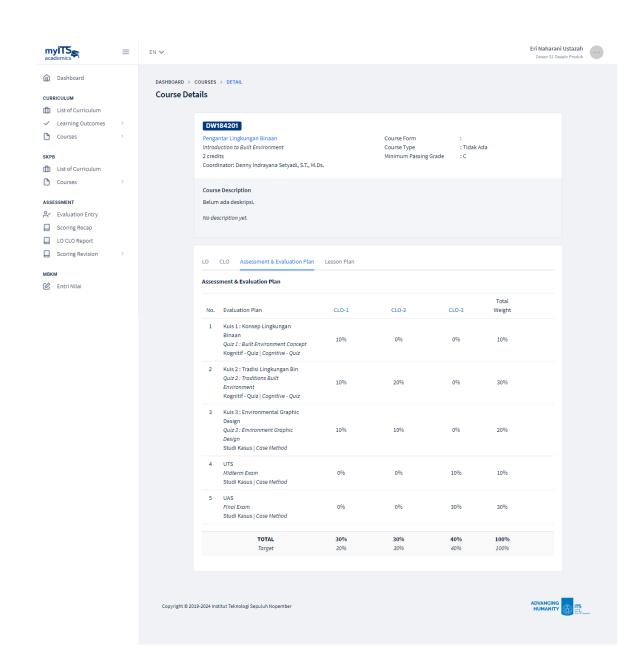
	Conference, 5, 627. https://doi.org/10.17770/sie2020vol5.4870
Planned learning activities and teaching methods	Problem-Based Learning
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Midterm Exam, and Final Exam

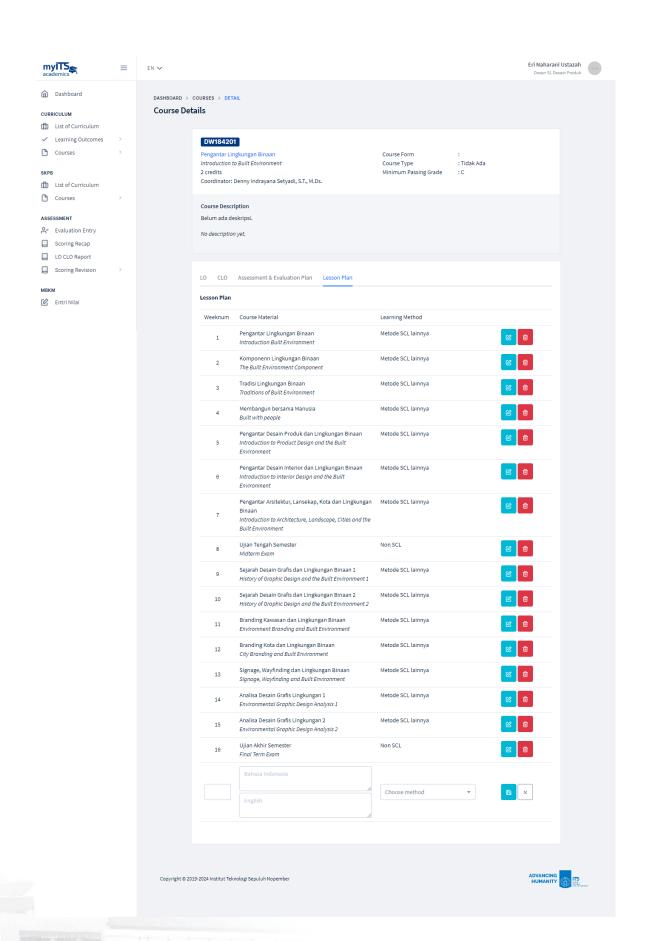
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### **Capture My ITS ACADEMIC**











### Mathematics DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023

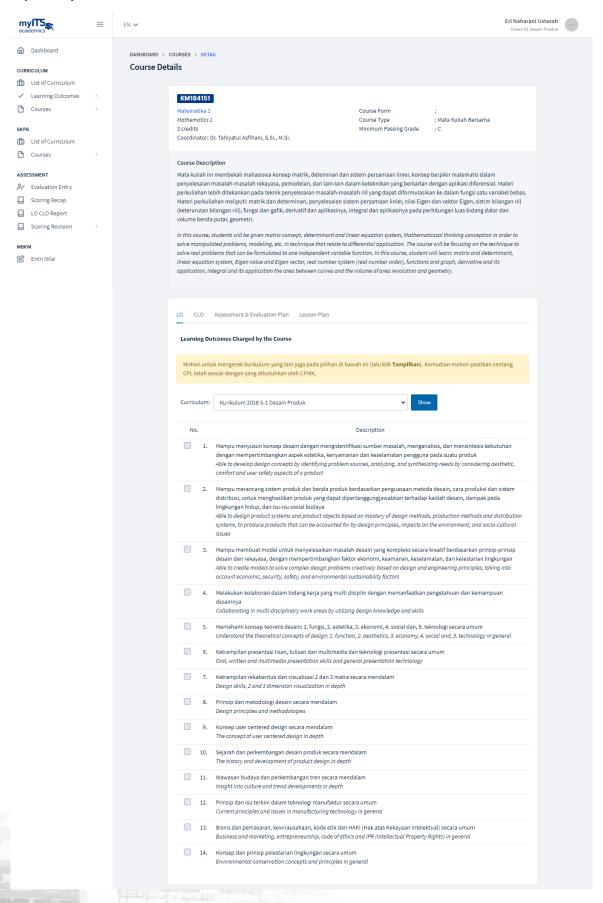
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

Course unit title	Mathematics
Course unit code	KM184101
Type of course unit	compulsory
Level of course unit	first cycle Bachelor
Year of study when the course unit is delivered	1 <sup>st</sup> year
Semester/trimester when the course unit is delivered	2 <sup>st</sup> Semester
Number of ECTS credits allocated	4,8 Credits
Name of lecturer	Dr. Tahiyatul Asfihani, S.Si., M.Si.
Learning outcomes of the course unit  Mode of delivery (face-to-face,	<ol> <li>Able to interpret basic mathematical concepts and prepare proofs directly, indirectly, or by mathematical induction.</li> <li>Able to identify simple problems, form mathematical models and solve them.</li> <li>Master standard methods in mathematics.</li> <li>Able to master fundamental mathematical theory which includes the concepts of matrices, determinants, complex numbers and equations or inequalities, as well as functions, derivatives, and integrals.</li> <li>Able to identify and solve problems, form mathematical models and solve them.</li> <li>face-to-face</li> </ol>
distance learning)	
Prerequisites and co-requisites	-
Course content	<ol> <li>Matrix and Determinants.</li> <li>Equations, inequalities, graphs of functions of parabolas, circles or ellipses.</li> <li>Complex numbers and their polar forms.</li> <li>Continuity of Functions and their derivatives.</li> <li>Integrals and Fundamental theorems of Calculus.</li> </ol>
Recommended or required reading and other learning resources/tools	<ol> <li>Tim Dosen Jurusan Matematika ITS, Buku Ajar Kalkulus 1, Edisi ke-4 Jurusan Matematika ITS, 2018</li> <li>Anton, H. dkk, Calculus, 10-th edition, John Wiley &amp; Sons, New York, 2012.</li> <li>Kreyzig, E, Advanced EngineeringMathematics, 10- th edition, John Wiley &amp; Sons, Singapore, 2011.</li> </ol>

	<ol> <li>Purcell, J, E, Rigdon, S., E., Calculus, 9-th edition, Prentice-Hall, New Jersey, 2006.</li> <li>James Stewart, Calculus, ed.7, Brooks/cole-Cengage Learning, Canada,2012.</li> <li>Strogatz, Steven. 2013. The Joy Of X: A Guided Tour of Math, from One to Infinity. New York: Mariner Books.</li> <li>Budhi, Wono Setya. 2001. Kalkulus Peubah banyak dan Penggunaanya. Bandung: ITB.</li> <li>Graham, Alexander. 2018. Kronecker Products and Matrix Calculus with Applications. Dover Publications.</li> <li>Ayes, Frank dan Elliot Mendelson. 2004. Kalkulus Lanjut Edisi Keempat. Jakarta: Erlangga. 1988. Calculus (2nd edition). New York: WB Saunders,</li> </ol>
Planned learning activities and teaching methods	Lectures, Tutorial activities, exercises
Language of instruction	Indonesia and English
Assessment methods and criteria	Assignment, Group Project, Quiz, Midterm Exam and Final Exam

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### **Capture My ITS ACADEMIC**



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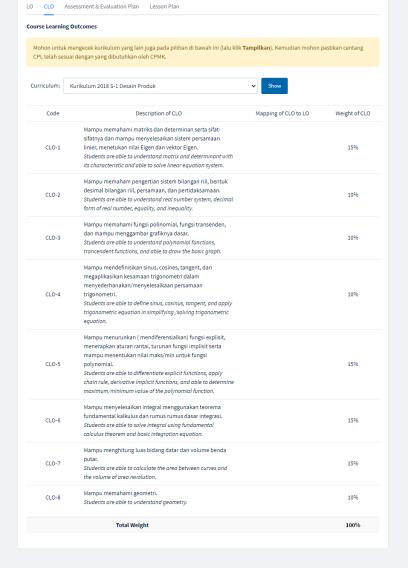
#### **Course Details**



perkuliahan lebih ditekankan pada teknik penyelesaian masalah-masalah rill yang dapat diflormulasikan ke dalam fungsi satu variabel bebas.
Materi perkuliahan meliputi: matrik dan determinan, penyelesaian sistem persamaan linier, nilai Eigen dan vektor Eigen, sistim bilangan rilli (keterurutan bilangan rilli), fungsi dan gafik, derivatif dan aplikasinya, integral dan aplikasinya pada perhitungan luas bidang datar dan volume benda putar, geometri.

In this course, students will be given matrix concept, determinant and linear equation system, Mathematicssal thinking conception in order to

in this course, students with be given indust concept, december to a more requount system, industructures unitarity conception in order to solve manipulated problems, modeling, etc. in technique that relate to differential application. The course will be focusing on the technique to solve real problems that can be formulated to one independent variable function. In this course, student will learn matrix and determinant, linear equation system, Eigen value and Eigen vector, real number system (real number order), functions and graph, derivative and its application, integral and its application the area between curves and the volume of area revolution and geometry.



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CURRICULUM

List of Curriculum

✓ Learning Outcomes Courses

List of Curriculum

ASSESSMENT

A Evaluation Entry Scoring Recap

☐ LO CLO Report Scoring Revision

Entri Nilai

DASHBOARD > COURSES > DETAIL

Course Details

KM184151

Course Form Course Type Minimum Passing Grade Mathematics 1 : Mata Kuliah Bersama

Coordinator: Dr. Tahiyatul Asfihani, S.Si., M.Si.

Course Description

Mata kuliah ini membekali mahasiswa konsep matrik, deteminan dan sistem persamaan linier, konsep berpikir matematis dalam penyelesalan masalah-masalah rekayasa, pemodelan, dan lain-lain dalam keteknikan yang berkaitan dengan aplikasi diferensial. Materi perkuliahan lebih ditekankan pada teknik penyelesalan masalah-masalah riil yang dapat diformulasikan ke dalam fungsi satu variabel bebas. Materi perkuliahan meliputi: matrik dan determinan, penyelesalan sistem persamaan linier, nilai Eigen dan vektor Eigen, sistim bilangan riil (keterurutan bilangan riil), fungsi dan gafik, derivatif dan aplikasinya, integral dan aplikasinya pada perhitungan luas bidang datar dan volume benda putar, geometri.

In this course, students will be given matrix concept, determinant and linear equation system, Mathematicssal thinking conception in order to solve manipulated problems, modeling, etc. in technique that relate to differential application. The course will be focusing on the technique to solve real problems that can be formulated to one independent variable function. In this course, student will learn: matrix and determinant, linear equation system, Eigen value and Eigen vector, real number system (real number order), functions and graph, derivative and its application, integral and its application the area between curves and the volume of area revolution and geometry.

es:	ment & Evaluation Plan									
		CLO-	Total							
0.	Evaluation Plan	1	2	3	4	5	6	7	8	Weight
1	Tugas, keaftifan & dsb									
	Task, interaction & etc	5%	0%	0%	096	096	5%	10%	096	20%
	Kognitif - Tugas   Cognitive -	370	050	050	050	050	370	1070	050	2070
	Assignment									
2	Quis 1									
	Quiz 1	5%	5%	5%	096	096	0%	0%	096	15%
	Kognitif - Quiz   Cognitive - Quiz									
3	Quis 2									
	Quiz 2	096	096	0%	096	5%	5%	0%	596	15%
	Kognitif - Quiz   Cognitive - Quiz									
4	ETS									
	MidExam	596	5%	5%	10%	096	0%	0%	096	25%
	Kognitif - UTS   Cognitive -	370	370	370	1070	070	070	070	0.70	2370
	Midterm Exam									
5	UAS									
	FinalExam	096	0%	0%	096	10%	5%	5%	5%	25%
	Kognitif - UAS   Cognitive - Final	0.70	0.70	0.70	0.70	1070	370	370	370	2370
	Exam									
	TOTAL	15%	10%	10%	10%	15%	15%	15%	10%	100%
	Target	15%	10%	10%	10%	15%	15%	15%	10%	100%

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n Dashboard

CURRICULUM

List of Curriculum ✓ Learning Outcomes

Courses

SKPB

List of Curriculum

Courses

ASSESSMENT

A

✓ Evaluation Entry Scoring Recap

LO CLO Report Scoring Revision

Entri Nilai

DASHBOARD > COURSES > DETAIL

#### Course Details

KM184151

Matematika 1 Course Form

Mathematics 1 3 credits Course Type Minimum Passing Grade : Mata Kuliah Bersama

Coordinator: Dr. Tahiyatul Asfihani, S.Si., M.Si.

#### Course Description

Mata kuliah ini membekali mahasiswa konsep matrik, deteminan dan sistem persamaan linier, konsep berpikir matematis dalam mata kulun III membekan manasawa konsepinatik, deteriniani dan sistem persamaan ilmer, konsep berjiki matematis dalam penyelesalam masalah-masalah rekayasa, pemodelan, dan lain-lain dalam keteknikan yang berkaltan dengan aplikasi differensial. Materi perkuliahan lebih ditekankan pada teknik penyelesalan masalah-masalah rili yang dapat diformulasikan ke dalam fungsi satu variabel bebas. Materi perkuliahan meliputi: matrik dan determinan, penyelesalan sistem persamaan linier, nilai Eigen dan vektor Eigen, sistim bilangan rili (keterurutan bilangan rili), fungsi dan gafik, derivatif dan aplikasinya, integral dan aplikasinya pada perhitungan luas bidang datar dan volume benda putar, geometri.

In this course, students will be given matrix concept, determinant and linear equation system, Mathematicssal thinking conception in order to solve manipulated problems, modeling, etc. in technique that relate to differential application. The course will be focusing on the technique to solve real problems that can be formulated to one independent variable function. In this course, student will learn: matrix and determinant, linear equation system, Eigen value and Eigen vector, real number system (real number order), functions and graph, derivative and its application, integral and its application the area between curves and the volume of area revolution and geometry.

Lesson Plan         Course Material         Learning Method           1         Matriks dan Determinan & Penyelesalan Sistem Persamaan Linier. Motrix and Determinan & Solving Lineor Equation System         Non SCL           2         Nilal Eigen dan Vektor Eigen. Eigen Volue and Eigen Vector. Eigen Volue and Eigen Vector.  Solven Bilangan Real, logarithan, alial muttak & performance interpretakasmaan. Renof Number System, logarithms, absolute value & Innequalities. Roordinate bidang, garis, jarak dua stiki, lingkaran & parabola. The coordinates planes, lines, two points distonce, circle & parabola. The coordinates planes, lines, two points distonce, circle & parabola. The coordinates planes, lines, two points distonce, circle & parabola. The coordinates planes, lines, two points distonce, circle & parabola. The coordinates planes, lines, two points distonce, circle & parabola. The coordinates planes, lines, two points distonce, circle & parabola. The coordinates planes, lines, two points distonce, circle & parabola. The coordinates planes, lines, two points distonce, circle & parabola. The coordinates planes, lines, two points distonce, circle & parabola. The coordinates planes, lines, two points distonce, circle & parabola. The coordinates planes, tines, two points distonce, circle & parabola. The coordinates planes, tragent, cotangent; & grafik fungsi. Transcendent and trigonometri & grafik fungsi. Sinus, cosines, tangent, cotangent; secan, cosecan, personetti sinus,	LO CLO	Assessment & Evaluation Plan Lesson Plan	
Matriks dan Determinan & Penyelesalan Sistem Persamaan Linier. Motrix and Determinant & Solving Linear Equation System  Non SCL  Nilal Eigen dan Vektor Eigen. Eigen Volue and Eigen Vector.  Sistem Bilangan Real, logaritma, nilai mutlak & person de la dela dela dela dela dela dela del	Lesson Plan		
Persamaan Linier. Matrix and Determinant & Solving Linear Equation System  Nilal Eigen dan Vektor Eigen. Eigen Value and Eigen Vector.  Sistem Bilangan Real, logaritma, nilai mutlak & petridaksamaan. Real Number System, logarithms, obsolute value & Inequalities.  Koordinast bidang, garis, jarak dua titik, lingkara & parabola. The coordinast planes, lines, two points distance, circle & parabola. The coordinates planes, lines, two points distance, circle & parabola. The coordinates planes, lines, two points distance, circle & parabola. The property and operation functions, polymomial functions & inverse functions  Fungsi dan operation functions, polymomial functions & inverse functions  Sinus, cosines, tangent, cotangent, gardiik fungsi. Transcendent and trigonometry functions, graph functions.  Sinus, cosines, tangent, cotangent, secan, cosecan, persamaan trigonometri Sinus, tangent, cotangent, secan, cosecan, trigonometry equation.  Sinus, cosinus, tangent, cotangent, secan, cosecan, persamaan trigonometri Sinus, tangent, cotangent, secan, cosecan, trigonometry equation.  Turunan, aplikasi turunan. The derivative, applications of derivatives.  Linit fungsi & kontinuitas Linit functions & continuity  Integral paraial. Integral tak tentu, integrasi dengan substitusi, integrasi paraial. Integration for titonof functions, trigonometric functions integration with substitution, partial  Integral pecahan rasional, integrasi fungsi fungsi trigonometry, kehnik integrasi yang lain. Integration of rotionof functions, trigonometric functions integration other integration technique.  Aplikasi integral tertentu: Lusa santara dua kurva Application of integral: The volume of area revolution.  Irisan kerucut, pencerminan, pergeseran dan	Weeknum	Course Material	Learning Method
Sistem Bilangan Real, logaritma, nilai mutlak & pertidaksaman.   Real Number System, logarithms, absolute value & Inequalities.   Non SCL	1	Persamaan Linier. Matrix and Determinant & Solving Linear Equation	NonSCL
Pertidaksamaan.   Red Number System, logarithms, absolute value & Inequalities.   Roordinate bidang, garis, jarak dua titik, lingkaran & Case method	2		Metode SCL lainnya
parabola. The coordinates planes, lines, two points distance, circle & parabola.  Fungsi dan operasi fungsi, fungsi polinomial & invers fungsi, Property and operation functions, polynomial functions inverse functions  Fungsi transenden dan trgonometri & grafik fungsi. Transcendent and trigonometry functions, graph functions.  Sinus, cosines, tangent, cotangent, secan, cosecan, persamaan trigonometri Sinus, cosinus, tangent, cotangent, secan, cosecan, trigonometry equation.  ETS MIDTERM EXAM  Pulmit fungsi & kontinuitas Limit functions & continuity  Turunan, aplikasi turunan. The derivative, applications of derivatives.  Integral tak tentu, integrasi dengan substitusi, integrasi parsial. improper integral, integration with substitution, partial  Integration of rational functions, trigonometric functions integration, other integration technique.  Application of Integral: The area between curve  Application of Integral: The volume of area revolution.  Irisan kerucut, pencerminan, pergeseran dan proyeksi.	3	pertidaksamaan. Real Number System, logarithms, absolute value &	NonSCL
fungsi, Property and operation functions, polynomial functions & Inverse functions  Fungsi transenden dan trgonometri & grafik fungsi. Transcendent and trigonometry functions, graph functions.  Sinus, cosines, tangent, cotangent, secan, cosecan, persaman trigonometry functions.  ETS Non SCL  ETS MIDTERM EXAM Non SCL  Limit fungsi & kontinuitas Non SCL  Limit functions & continuity  Turunan, aplikasi turunan. The derivative, applications of derivatives.  Integral tak tentu, integrasi dengan substitusi, integrasi parsial. Improper integral, integrasi yarsial. Improper integral, integrasi yang lain. Metode SCL lainnya  trigonometri, teknik integrasi yang lain. Metode SCL lainnya  Application of Integration, other integration technique.  Application of Integrat: The area between curve  Application of Integrat: The volume of area revolution.  Irisan kerucut, pencerminan, pergeseran dan proyeksi.	4	parabola. The coordinates planes, lines, two points distance,	Case method
Sinus, cosines, tangent, cotangent, secan, cosecan, persamaan trigonometri  Sinus, cosines, tangent, cotangent, secan, cosecan, persamaan trigonometri  Sinus, cosines, tangent, cotangent, secan, cosecan, trigonometry equation.  BETS Non SCL  Limit fungsi & kontinuitas Non SCL  Limit fungsi & kontinuitas Non SCL  Turunan, aplikasi turunan. The derivative, applications of derivatives.  Integral tak tentu, integrasi dengan substitusi, integrasi parsial. Improper integral, integrasi parsial. Improper integral, integrasi yang lain. Integration of rational functions, trigonometric functions integration, other integration technique.  13 Aplikasi integral tertentu: Luas antara dua kurva Application of Integral: The area between curve  Aplikasi integral tertentu: menghitung volume benda putar.  Application of Integral: The volume of area revolution.  Irisan kerucut, pencerminan, pergeseran dan proyeksi.	5	fungsi, Property and operation functions, polynomial	Non SCL
7 persaman trigonometri Sinus, cosinus, tongent, cotongent, secan, cosecan, trigonometry equation.  8 ETS MIDTERM EXAM  9 Limit fungsi & kontinuitas Limit functions & continuity  10 Turunan, aplikasi turunan. The derivative, applications of derivatives.  11 lintegral tak tentu, integrasi dengan substitusi, integrasi parsial. Improper integral, integration with substitution, partial  12 lintegrasi pecahan rasional, integrasi fungsi fungsi trigonometri, teknik integrasi yang lain. Integration of rational functions, trigonometric functions integration, other integration technique.  13 Aplikasi integral tertentu: Luas antara dua kurva Application of Integral: The area between curve  14 Aplikasi integral tertentu: menghitung volume benda putar. Application of Integral: The volume of area revolution.  15 Irisan kerucut, pencerminan, pergeseran dan proyeksi.	6	Transcendent and trigonometry functions, graph	Metode SCL lainnya
8 MIDTERM EXAM 9 Limit fungsi & kontinuitas Limit functions & continuity 10 Turunan, aplikasi turunan. The derivative, applications of derivatives. 11 Integral tak tentu, integrasi dengan substitusi, integrasi parsial. Improper integral, integration with substitution, partial  12 Integrasi pecahan rasional, integrasi fungsi fungsi trigonometri, teknik integrasi yang lain. 12 Integration of ritolonal functions, trigonometric functions integration, other integration technique. 13 Aplikasi integral tertentu: Luas antara dua kurva Application of Integrai: The area between curve  Aplikasi integral tertentu: menghitung volume benda putar. Application of Integrai: The volume of area revolution.  Irisan kerucut, pencerminan, pergeseran dan proyeksi.	7	persamaan trigonometri Sinus, cosinus, tangent, cotangent, secan, cosecan,	Non SCL
Limit functions & continuity	8		Non SCL
Integral tak tentu, integrasi dengan substitusi, integrasi parsial. Improper integral, integrasi dengan substitution, partiol  Integrasi pecahan rasional, integrasi fungsi fungsi trigonometri, teknik integrasi yang lain. Integration of rational functions, trigonometric functions integration, other integration technique.  Integration of integration, other integration technique.  Application of integration and the cross Application of integration technique.  Application of integral: The area between curve  Application of integral: The volume of area revolution.  Irisan kerucut, pencerminan, pergeseran dan proyeksi.	9		Non SCL
integrasi parsial.  Improper Integral, Integration with substitution, partial  Integrasi pecahan rasional, integrasi fungsi fungsi trigonometri, teknik integrasi yang lain. Integration of rational functions, trigonometric functions integration, other integration technique.  13 Aplikasi integral tertentu: Luas antara dua kurva Application of Integral: The area between curve  Aplikasi integral tertentu: menghitung volume benda 14 putar. Application of Integral: The volume of area revolution.  Irisan kerucut, pencerminan, pergeseran dan proyeksi.	10		Case method
trigonometri, teknik integrasi yang lain. Integration of rational functions, trigonometric functions integration, other integration technique.  Aplikasi integral tertentu: Luas antara dua kurva Application of Integral: The area between curve  Aplikasi integral tertentu: menghitung volume benda  Case method  14 putar. Application of Integral: The volume of area revolution.  Irisan kerucut, pencerminan, pergeseran dan Non SCL proyeksi.	11	integrasi parsial. Improper integral, integration with substitution,	Non SCL
Application of Integral: The area between curve  Aplikasi integral tertentu: menghitung volume benda Case method  putar.  Application of Integral: The volume of area revolution.  Irisan kerucut, pencerminan, pergeseran dan Non SCL  proyeksi.	12	trigonometri, teknik integrasi yang lain. Integration of rational functions, trigonometric	Metode SCL lainnya
14 putar. Application of integral: The volume of area revolution.  Irisan kerucut, pencerminan, pergeseran dan Non SCL 15 proyeksi.	13		Non SCL
15 proyeksi.	14	putar.	Case method
	15	proyeksi.	Non SCL
16 EAS Non SCL FINAL EXAM	16		Non SCL





# Bahasa Indonesia DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



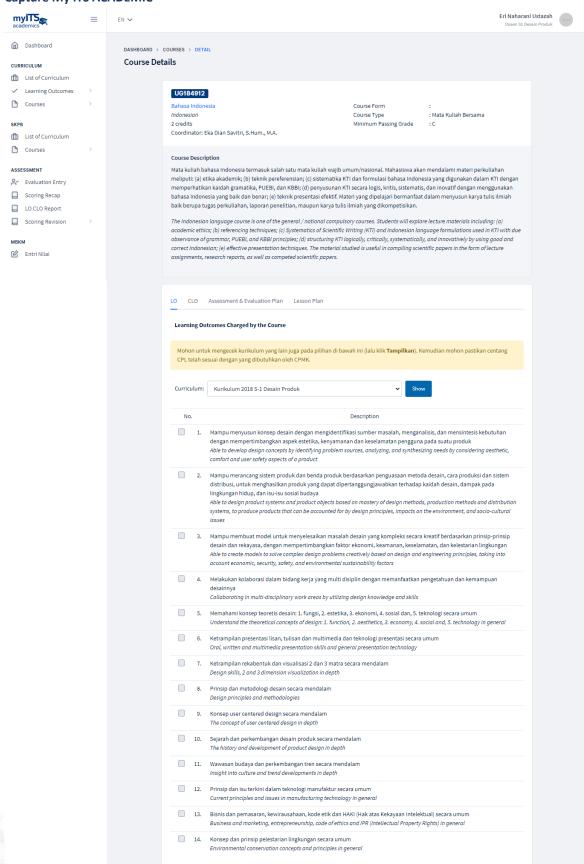
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

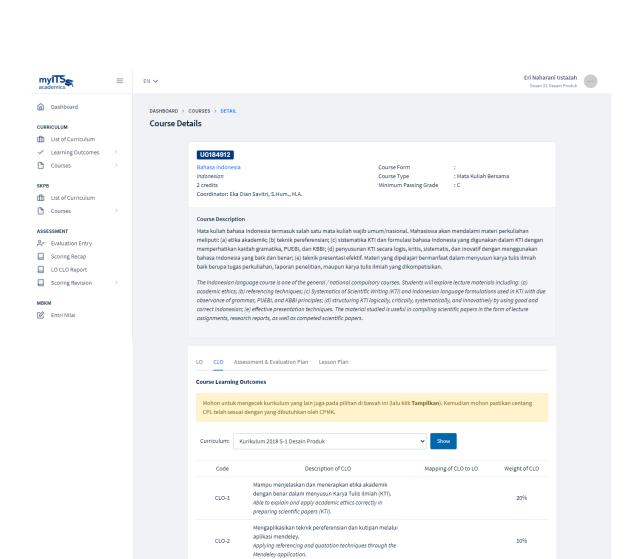
Course unit title	Bahasa Indonesia			
	Danasa mashesia			
Course unit code	UG 184911			
Type of course unit	compulsory			
Level of course unit	first cycle Bachelor			
Year of study when the course unit is delivered	1 <sup>st</sup> year			
Semester/trimester when the course unit is delivered	2 <sup>nd</sup> Semester			
Number of ECTS credits allocated	3,2 ECTS credit			
Name of lecturer	Eka Dian Savitri, S.Hum., M.A.			
Learning outcomes of the course unit	<ol> <li>Students are able to explain and apply academic ethics correctly in preparing KTI;</li> <li>Students are able to find, store, and process references through the Mendeley application to avoid plagiarism;</li> <li>Students are able to explain and / or provide systematic examples, Indonesian language formulations used in KTI with due observance of grammatical rules, PUEBI, and KBBI</li> <li>Students are able to apply logical, critical, systematic, and innovative thinking in the preparation of the introductory KTI using good and correct Indonesian.</li> <li>Students are able to apply logical, critical, systematic, and innovative thinking in the compilation of the KTI results and discussion sections using good and correct Indonesian.</li> <li>Students are able to apply logical, critical, systematic, and innovative thinking in the preparation of KTI conclusions using good and correct Indonesian.</li> <li>Able to present the results of the preparation of KTI orally according to the principles of effective communication.</li> </ol>			
Mode of delivery (face-to-face, distance learning)	face-to-face			
Prerequisites and co-requisites				
Course content	<ol> <li>Academic writing of scientific papers.</li> <li>Reference techniques and Mendeley applications for</li> </ol>			

reference systems.  3. Systematics, selingkung style, and grammatical for the Indonesian language in KTI.  4. Effective presentation.  Recommended or required reading and other learning resources/tools  1. Alwi, Hasan, 2007, Tata Bahasa Baku Balade Indonesia, Edisi Ketiga, Balai Pustaka: Jakalade Indonesia Indonesia untuk Perguruan Tinggi, 2016, Jakarta, Dirjen Belmawa.  3. Kamus Besar Bahasa Indonesia (daring ataluring), Kemdikbud RI.4. Pedoman Umum Bahasa Indonesia (PUEBI), 2016, 5.  4. Suyono, dkk. 2015. Cerdas Menulis Karya Ilmiah. Malang: Gunung Samudera	ahasa arta. uu
for the Indonesian language in KTI.  4. Effective presentation.  Recommended or required reading and other learning resources/tools  1. Alwi, Hasan, 2007, Tata Bahasa Baku Bala Indonesia, Edisi Ketiga, Balai Pustaka: Jakala Pustaka: Jakal	ahasa arta. uu
4. Effective presentation.  Recommended or required reading and other learning resources/tools  1. Alwi, Hasan, 2007, Tata Bahasa Baku Balandenesia, Edisi Ketiga, Balai Pustaka: Jakandenesia, Edisi Ketiga, Balai Pustaka: Jakandenesia (Dirjen Pembelajaran dan Kemahasiswaan Kemenristekdikti, Bahasa Indonesia untuk Perguruan Tinggi, 2016, Jakarta, Dirjen Belmawa.  3. Kamus Besar Bahasa Indonesia (daring ataluring), Kemdikbud RI.4. Pedoman Umum Bahasa Indonesia (PUEBI), 2016, 5.  4. Suyono, dkk. 2015. Cerdas Menulis Karya	arta. Iu
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Bahasa Indonesia (PUEBI), 2016, 5. 4. Suyono, dkk. 2015. Cerdas Menulis Karya	jaan
4. Suyono, dkk. 2015. Cerdas Menulis Karya	
Ilmiah. Malang: Gunung Samudera	
5. Universitas Negeri Malang. 2015. Pedomar	
Penulisan Karya Ilmiah, Malang	
6. Suyanto, Edi. 2015. Membina, Memelihara	
Menggunakan Bahasa Indonesia Secara B Jakarta	enar.
7. Wounde, Sawidagdo. 2005. Bahasa Indone	sia
untuk Mahasiswa Jurusan Nonbahasa	Jiu
Indonesia, Jakarta	
8. Arifin, Zaenal dan Amran Tasai, (2004), Ce	mat
Berbahasa. Jakarta	
9. Wijayanti, Sri Hapsari, dkk. (2013). Bahasa	
Indonesia: Penulisan dan Penyajian Karya	
Ilmiah. Jakarta	
10. Alwi, Hasan, dkk. 2014. Tata Bahasa Baku	
Bahasa Indonesia (Edisi 3). Jakarta	
Planned learning activities and Problem-Based Learning	
teaching methods	
Language of instruction Indonesia	_
Assessment methods and Presentations, assignments, discussions, final exa	n
criteria	

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Mampu menjelaskan dan/atau memberikan contoh sistematika, formulasi bahasa Indonesia yang digunakan dalam karya tulis ilmiah dengan memperhatikan kaidah

CLO-3 gramatika, PUEBI, dan KBBI. 10%

Able to exploin the systematics and formulations of Indonesian used in KTI by paying attention to the rules of grammar, PUEBI, and KBBI.

Mampu menerapkan pemikiran logis, kritis, sistematis, dan Inovatif dalam penyusunan karya tulis ilmiah dengan menggunakan bahasa Indonesia yang baik dan benar.

Able to apply logical, critical, systematic, and innovative thinking writing scientific papers using good and correct Indonesian.

Mempresentasikan hasil penyusunan karya tulis ilmiah secara lisan sesuai prinsip komunikasi efektif.

CLO-5 Secara lisan sesuai prinsip komunikasi efektif. 15%
Able to present the results of the preporation of KTI orally according to the principles of effective communication.

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n Dashboard

CURRICULUM

List of Curriculum ✓ Learning Outcomes

Courses

ffi List of Curriculum

ASSESSMENT

A Evaluation Entry

Scoring Recap LO CLO Report

Scoring Revision

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DASHBOARD > COURSES > DETAIL

#### Course Details

UG184912

Indonesian

Course Form Course Type Minimum Passing Grade

: Mata Kuliah Bersama

Course Description

Coordinator: Eka Dian Savitri, S.Hum., M.A.

Mata kuliah bahasa Indonesia termasuk salah satu mata kuliah wajib umum/nasional. Mahasiswa akan mendalami materi perkuliahan mela katian tahasa hidonesia terhasun salah isati maka kulah wajib diminintasionak anah mendalah maken pekkulilah meliputi: (a) etika akademik; (b) teknik pereferensian; (c) sistematika KTI dan formulasi bahasa Indonesia yang digunakan dalam KTI dengan memperhatikan kaidah gramatika, PUEBI, dan KBBI; (d) penyusunan KTI secara logis, kritis, sistematis, dan inovatif dengan menggunakan bahasa Indonesia yang baik dan benar; (e) teknik presentasi efektif. Materi yang dipelajari bermanfaat dalam menyusun karya tulis ilmiah baik berupa tugas perkuliahan, laporan penelitian, maupun karya tulis ilmiah yang dikompetisikan.

The Indonesian language course is one of the general / national compulsory courses. Students will explore lecture materials including: (a) academic ethics; (b) referencing techniques; (c) Systematics of Scientific Writing (RTI) and Indonesian language formulations used in RTI with due observance of grammar, PUEBI, and KBBI principles; (d) structuring KTI logically, critically, systematically, and innovatively by using good and correct Indonesian; (e) effective presentation techniques. The material studied is useful in compiling scientific papers in the form of lecture assignments, research reports, as well as competed scientific papers.

ssess	ment & Evaluation Plan							
No.	Evaluation Plan	CLO-1	CLO-2	CLO-3	CLO-4	CLO-5	Total Weight	
1	Penilaian 1 : Etika Akademik Assessment 1 : Academic ethics Studi Kasus   Case Method	10%	0%	0%	0%	0%	10%	
2	Penilaian 2 : Praktik antiplagiasi assessment 2 : Anti-plagiarism practice Hasil proyek   Team-based Project	10%	0%	0%	0%	0%	10%	
3	Penilaian 3: praktik sitasi dan mendeley Assessment 3: mendeley citation practice Studi Kasus   Case Method	0%	10%	0%	0%	0%	10%	
4	Penilaian 4: Review artikel ilmiah Assessment 4:reviewing scientific papers Studi Kasus   Case Method	096	0%	10%	0%	0%	10%	
5	Penilaian5:menulis artikel jurnal ilmiah assessment 5: writing scientific papers Hasil proyek   Team-based Project	096	0%	0%	22.5%	0%	22.5%	
6	Penilaian 6: presentasi ilmiah assessment 6: paper presentation Studi Kasus   Case Method	0%	096	0%	0%	15%	15%	
7	Penilaian 7: menulis esai ilmiah assessment 7: writing scientific essay Kognitif - UAS   Cognitive - Final Exam	096	0%	0%	22.5%	0%	22.5%	
	TOTAL	<b>20%</b>	10% 10%	10%	<b>45%</b>	15%	100% 100%	



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#### CURRICULUM

List of Curriculum

✓ Learning Outcomes > Courses

#### SKPB

List of Curriculum

#### Courses

#### ASSESSMENT

A Evaluation Entry

Scoring Recap

#### LO CLO Report Scoring Revision

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DASHBOARD > COURSES > DETAIL

#### Course Details

#### UG184912

Bahasa Indones Indonesian

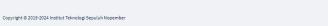
Course Form Course Type Minimum Passing Grade : Mata Kuliah Bersama 2 credits

Coordinator: Eka Dian Savitri, S.Hum., M.A.

Mata kuliah bahasa indonesia termasuk salah satu mata kuliah wajib umum/nasional. Mahasiswa akan mendalami materi perkuliahan meliputi: (a) etika akademik; (b) teknik pereferensian; (c) sistematika KTI dan formulasi bahasa Indonesia yang digunakan dalam KTI dengan memperhatikan kaidah garmatika, PUEBI, dan KBBI; (d) penyusunan KTI secara logis, kritis, sistematis, dan inovatif dengan menggunakan bahasa Indonesia yang baik dan benari; (e) teknik pesentasi efektif. Materi yang dipelajari bermanfaat dalam menyusun karya tulis ilmiah baik berupa tugas perkuliahan, laporan penelitian, maupun karya tulis ilmiah yang dikompetisikan.

The Indonesian language course is one of the general / national compulsory courses. Students will explore lecture materials including: (a) academic ethics; (b) referencing techniques; (c) Systematics of Scientific Writing (KTI) and indonesian language formulations used in KTI with due observance of grammar, PUEBI, and KBBI principles; (d) structuring KTI logically, critically, systematically, and innovatively by using good and correct indonesian; (e) effective presentation techniques. The material studied is useful in compiling scientific papers in the form of lecture assignments, research reports, as well as competed scientific papers.

LO C	CLO	Assessment & Evaluation Plan	Lesson Plan	
Lesson	Plan			
Weekn	num	Course Material		Learning Method
1		Etika akademik penulisan karya il Ethics of writing scientific papers	miah.	Case method
2		Etika akademik penulisan karya il Ethics of writing scientific papers.	miah.	Case method
3		Teknik pereferensian dan aplikasi sistem pereferensian. Mendeley reference techniques and		Case method
4		Teknik pereferensian dan aplikasi sistem pereferensian. Mendeley reference techniques and		Case method
5		Sistematika, gaya selingkung, dar bahasa indonesia dalam artikel ju Systematics, writing style and Indo grammatical rules in scientific jour	rnal ilmiah. nesian	Case method
6		Sistematika, gaya selingkung, dar bahasa Indonesia dalam artikel ju Systematics, writing style and Indo grammatical rules in scientific jour	rnal ilmiah. nesian	Case method
7		Penerapan sistematika, gaya selin gramatika bahasa Indonesia dalai ilmiah bagian pendahuluan. Practising systematics, writing styi grammatical rules in scientific jour introduction part.	m artikel jurnal e and Indonesian	Team-based project
8		Penerapan sistematika, gaya selin gramatika bahasa Indonesia dalai ilmiah bagian pendahuluan Practising systematics, writing styl grammatical rules in scientific jour introduction part.	m artikel jurnal e and Indonesian	Team-based project
9		Penerapan sistematika, gaya selin gramatika bahasa Indonesia dalai Ilmilah bagian pembahasan. Practising systematics, writing styr grammatical rules in scientific jour discussion part.	m artikel jurnal e and Indonesian	Team-based project
10	0	Penerapan sistematika, gaya selin gramatika bahasa Indonesia dalai ilmiah bagian pembahasan. Practising systematics, writing styl grammatical rules in scientific jour discussion part.	n artikel jurnal e and Indonesian	Team-based project
11	1	Penerapan sistematika, gaya selin gramatika bahasa Indonesia dalai ilmiah bagian penutup. Practising systematics, writing styl grammatical rules in scientific jour conclusion part.	n artikel jurnal e and Indonesian	Team-based project
12	2	Presentasi efektif untuk karya tuli Effective presentation for a scientii		Team-based project
13	3	Presentasi efektif untuk karya tuli Effective presentation for a scientii		Team-based project
14	4	Presentasi efektif untuk karya tuli Effective presentation for a scientif		Team-based project
15	5	Evaluasi akhir semester: Menulis e Final term evaluation: writing a sci		Metode SCL lainnya
16	5	Evaluasi akhir semester: Menulis e Final term evaluation: writing a sci		Metode SCL lainnya





# Pancasila DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



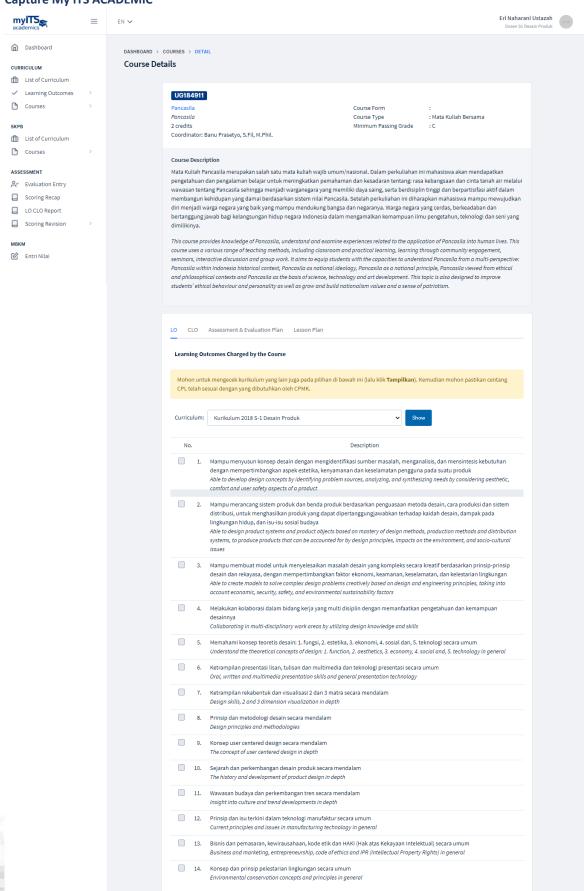
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

Course unit title	Pancasila
Course unit code	UG 184912
Type of course unit	compulsory
Level of course unit	first cycle Bachelor
Year of study when the course unit is delivered	1st year
Semester/trimester when the course unit is delivered	2 <sub>nd</sub> Semester
Number of ECTS credits allocated	3,2 ECTS credits
Name of lecturer	Pancasila ITS lecturer team
Learning outcomes of the course unit	<ol> <li>Able to understand the importance of history to strengthen national identity and Indonesian national identity</li> <li>Able to analyze factual national problems based on the Pancasila perspective</li> <li>Able to analyze the concept of developing science and technology based on the values of Pancasila</li> <li>Able to practice social sensitivity, environmental awareness and love for the country</li> </ol>
Mode of delivery (face-to-face, distance learning)	face-to-face
Prerequisites and co-requisites	
Course content	<ol> <li>The urgency of Pancasila in higher education.</li> <li>Pancasila and Indonesia history.</li> <li>Pancasila as the Indonesia national principle and national ideology.</li> <li>Pancasila as a philosophy system.</li> <li>Pancasila as an ethic system.</li> <li>Pancasila as the foundation of science, technology and art development</li> </ol>
Recommended or required reading and other learning resources/tools	1. Bahar, Saafroedin (ed). 1992. Risalah Sidang Badan Penyelidik Usaha-Usaha Persiapan Kemerdekaan Indonesia (BPUPKI): Panitia Persiapan Kemerdekaan Indonesia (PPKI) 29 Mei – 19 Agustus 1945. Jakarta: Sekretariat Negara Republik Indonesia.  2. Bertens, Kees. 2004. Etika. Jakarta: Gramedia.

Assessment methods and criteria	Discussion, group project, presentation, assignment, midterm examination, final examination
Language of instruction	Indonesia
Planned learning activities and teaching methods	Problem-Based Learning, Project-Based Learning and Blended Learning
Planned learning activities and	<ol> <li>Friedman, Thomas. 2006. The World is Flat:         Sejarah Ringkas Abad ke 21. Jakarta: Dian Rakyat</li> <li>Kattsoff, Louis O. 1992. Pengantar Filsafat. Yogyakarta: Tiara Wacana.</li> <li>Latif, Yudi. 2011. Negara Paripurna, Jakarta: PT. Gramedia Pustaka Utama.</li> <li>Latif, Yudi. 2018. Wawasan Pancasila: Bintang Penuntun Untuk Pembudayaan. Jakarta: Mizan.</li> <li>Magnis-Suseno, Franz. 2006. Etika Politik: Prinsip-prinsip Moral Dasar Kenegaraan Modern. Jakarta: Penerbit Gramedia Pustaka Utama.</li> <li>Schwab, Klaus. 2016. The Fourth Industrial Revolution. New York: Crown Business.</li> <li>Sukarno. 2001. Tjamkan Pancasila Dasar Falsafah Negara. Jakarta: Panitia Nasional Peringatan Lahirnya Pancasila 1 Juni 1945 – 1 Juni 1964.</li> <li>Soedarso. 2014. Filsafat Pancasila Identitas Indonesia. Surabaya: Pustaka Radja.</li> </ol>

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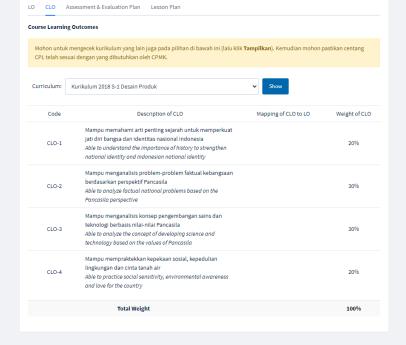
DASHBOARD > COURSES > DETAIL

#### **Course Details**



Mata Kuliah Pancasila merupakan salah satu mata kuliah wajib umum/nasional. Dalam perkuliahan ini mahasiswa akan mendapatkan pengetahuan dan pengalaman belajar untuk meningkatkan pemahaman dan kesadaran tentang; rasa kebangsaan dan cinta tanah air melalui wawasan tentang Pancasila sehingga menjadi warganegara yang memiliki daya saing, serta berdispiln tinggi dan berpartisifasi aktif dalam membangun kehidupan yang damai berdasarkan sistem nilai Pancasila. Setelah perkuliahan ini diharapkan mahasiswa mampu mewujudkan diri menjadi warga negara yang baik yang mampu mendukung bangsa dan negaranya. Warga negara yang cerdas, berkeadaban dan bertanggung jawab bagi kelangsungan hidup negara Indonesia dalam mengamalkan kemampuan ilmu pengetahun, teknologi dan seni yang dimilikinya.

This course provides knowledge of Pancasila, understand and examine experiences related to the application of Pancasila into human lives. This course uses a various range of teaching methods, including classroom and practical learning, learning through community engagement, seminars, interactive discussion and group work. It aims to equip students with the capacities to understand Pancasila from a multi-perspective: Pancasila within indonesia historical context, Pancasila as national ideology, Pancasila as a national principle, Pancasila viewed from ethical and philosophical contexts and Pancasila as the basis of science, technology and art development. This topic is also designed to improve students' ethical behaviour and personality as well as grow and build nationalism values and a sense of patriotism.



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CURRICULUM

List of Curriculum

✓ Learning Outcomes Courses

ff List of Curriculum

Courses

ASSESSMENT

A Evaluation Entry Scoring Recap

☐ LO CLO Report Scoring Revision

Entri Nilai

DASHBOARD > COURSES > DETAIL

#### Course Details

UG184911

Pancasila Coordinator: Banu Prasetvo, S.Fil, M.Phil. Course Form

: Mata Kuliah Bersama

Course Type Minimum Passing Grade

Course Description

Mata Kuliah Pancasila merupakan salah satu mata kuliah wajib umum/nasional. Dalam perkuliahan ini mahasiswa akan mendapatkan Mata Kuluan rancasian merupakan salah satu mata kulian wajib umum/nasional. Dalam perkuliahan ini manasiawa akan mendapatkan pengelahan belajar untuk meningkatkan pemahaman dan kesadaran tentang "rasa kebangsaan dan cinta tanah air melalul wawasan tentang Pancasila sehingga menjadi warganegara yang memiliki daya saing, serta berdisiplin tinggi dan berpartisifasi aktif dalam membangun kehidupan yang damai berdasarkan sistem nilal Pancasila. Setelah perkuliahan ini diharapkan mahasiswa mampu mewujudkan diri menjadi warga negara yang balik yang mampu mendukung bangsa dan negaranya. Warga negara yang cerdas, berkeadaban dan bertanggung jawab bagi kelangsungan hidup negara Indonesia dalam mengamalkan kemampuan ilmu pengetahun, teknologi dan seni yang

This course provides knowledge of Pancasila, understand and examine experiences related to the application of Pancasila into human lives. This course uses a various range of teaching methods, including classroom and practical learning, learning through community engagement, seminars, interactive discussion and group work. It aims to equip students with the capacities to understand Pancasila from a multi-perspective: Pancasila within Indonesia historical context, Pancasila as national ideology, Pancasila as a national principle, Pancasila viewed from ethical and philosophical contexts and Pancosila as the basis of science, technology and art development. This topic is also designed to improve students' ethical behaviour and personality as well as grow and build nationalism values and a sense of patriotism.

LO	CLO	Assessment & Evaluation Plan	Lesson Plan					
sses	ssessment & Evaluation Plan							
No.	Evalı	uation Plan	CLO-1	CLO-2	CLO-3	CLO-4	Total Weight	
1	Indiv	is Individu 1 vidual assignment Ii Kasus   Case Method	10%	0%	0%	0%	10%	
2	Assig	s individu 2 gnment 2  I Kasus   Case Method	0%	15%	0%	096	15%	
3	Mid i Kogr	uasi Tengah Semester Term nitif - UTS   Cognitive - erm Exam	10%	10%	0%	096	2096	
4	Grou	is Kelompok 1 Ip Assignment 1 Il Kasus   Case Method	0%	0%	10%	096	10%	
5	Grou	is Kelompok 2 ip Assignment 2 I proyek   Team-based Project	0%	0%	0%	20%	20%	
6	Fina	uasi Akhir Semsester <i>I Exam</i> nitif - UAS   <i>Cognitive - Final</i> n	0%	5%	20%	0%	25%	
		<b>TOTAL</b> Target	<b>20%</b> 20%	<b>30%</b> 30%	<b>30%</b> 30%	<b>20%</b> 20%	<b>100%</b> 100%	



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CURRICULUM

List of Curriculum

✓ Learning Outcomes

Courses

List of Curriculum Courses

ASSESSMENT

A Evaluation Entry Scoring Recap

LO CLO Report Scoring Revision

Entri Nilai

DASHBOARD > COURSES > DETAIL

#### Course Details

UG184911

Course Form

Course Type Minimum Passing Grade Pancasila : Mata Kuliah Bersama

Coordinator: Banu Prasetvo, S.Fil, M.Phil.

#### Course Description

Mata Kuliah Pancasila merupakan salah satu mata kuliah wajib umum/nasional. Dalam perkuliahan ini mahasiswa akan mendapatkan Mata Kulian Pancasila merupakan salah satu mata kulian wajio umum/nasional. Dalam perkuliahan ini mamasiwa kata mendapatkan pengetahuan dan pengalaman belajar untuk meningkatkan pemahaman dan kesadaran tentang; rasa kebangsaan dan cinta tanah air melalul wawasan tentang Pancasila sehingga menjadi warganegara yang memiliki daya saing, serta berdisiplin tinggi dan berpartisifasi aktif dalam membangun kehidupan yang damai berdasarkan sistem nilal Pancasila. Setelah perkuliahan ini diharapkan mahasiswa mampu mewujudkan diri menjadi warga negara yang balik yang mampu mendukung bangsa dan negaranya. Warga negara yang cerdas, berkeadaban dan bertanggung jawab bagi kelangsungan hidup negara Indonesia dalam mengamalkan kemampuan ilmu pengetahun, teknologi dan seni yang

 $This \ course \ provides \ knowledge \ of \ Pancasila, understand \ and \ examine \ experiences \ related \ to \ the \ application \ of \ Pancasila \ into \ human \ lives. \ This$  $course\ uses\ a\ various\ range\ of\ teaching\ methods, including\ classroom\ and\ practical\ learning, learning\ through\ community\ engagement,$ seminars, interactive discussion and group work. It aims to equip students with the capacities to understand Pancasila from a multi-perspective: Pancasila within Indonesia historical context, Pancasila as national ideology, Pancasila as a national principle, Pancasila viewed from ethical and philosophical contexts and Pancasila as the basis of science, technology and art development. This topic is also designed to improve students' ethical behaviour and personality as well as grow and build nationalism values and a sense of patriotism.

son Plan		
/eeknum	Course Material	Learning Method
1	Urgensi Pendidikan Pancasila The Urgency of Pancasila	Case method
2	Indonesia dalam Arus Sejarah Bangsa: Pra Kemerdekaan History of Indonesia: Pre Independence Era	Non SCL
3	Indonesia dalam Arus Sejarah Bangsa: Kemerdekaan dan Pasca Kemerdekaan History of Indonesia: Post Independence Era	Non SCL
4	Pancasila sebagai Dasar Negara Republik Indonesia Pancasila as The Basis of Republic Indonesia	Case method
5	Pancasila sebagai Ideologi Pancasila as Ideology	Non SCL
6	Studi kasus Pancasila sebagai Dasar Negara Indonesia Pancasila as The Basis of Republic Indonesia: Case Study	Team-based project
7	Studi Kasus Pancasila sebagai Ideologi Pancasila as Ideology: a Case Study	Team-based project
8	Evaluasi Tengah Semester Mid Term Evaluation	Non SCL
9	Philosophy Philosophy	Case method
10	Etika Ethics	Case method
11	Pancasila sebagai Sistem Filsafat Pancasila as Philosphy	Team-based project
12	Pancasila sebagai sistem etika Pancasila as Ethics System	Team-based project
13	Pancasila sebagai landasan pengembangan ilmu pengetahuan Pancasila as the basis for Science Development	Team-based project
14	Pancasila sebagai landasan pengembangan ilmu pengetahuan: Studi Kasus Pancasila as the basis for Science Development: Case Study	Team-based project
15	Resume Materi Material Review (from the begining until end of material)	Non SCL
16	Evaluasi Akhir Semester Final Evaluation (Final Exam)	Non SCL

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## **3rd SEMESTER**

Bachelor of Industrial Design (BOID)





# Design Basics 3 DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



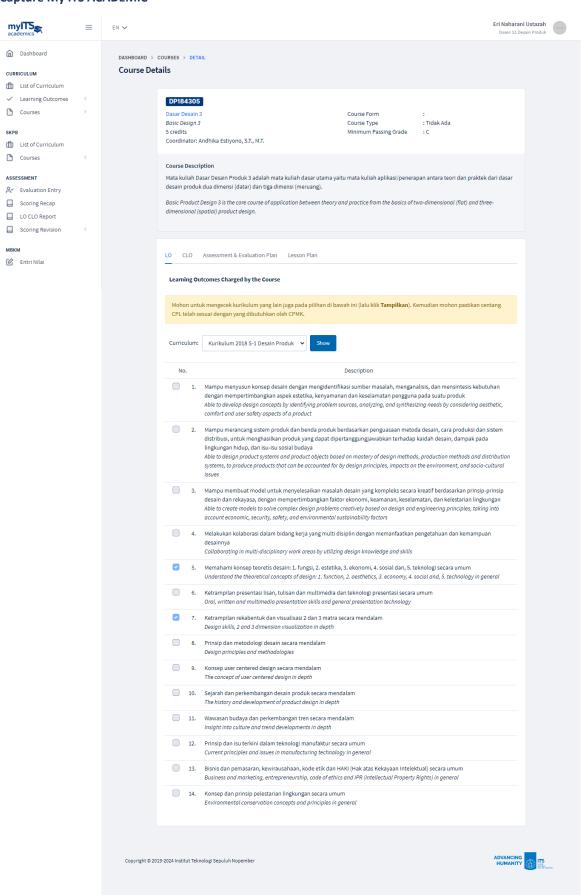
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

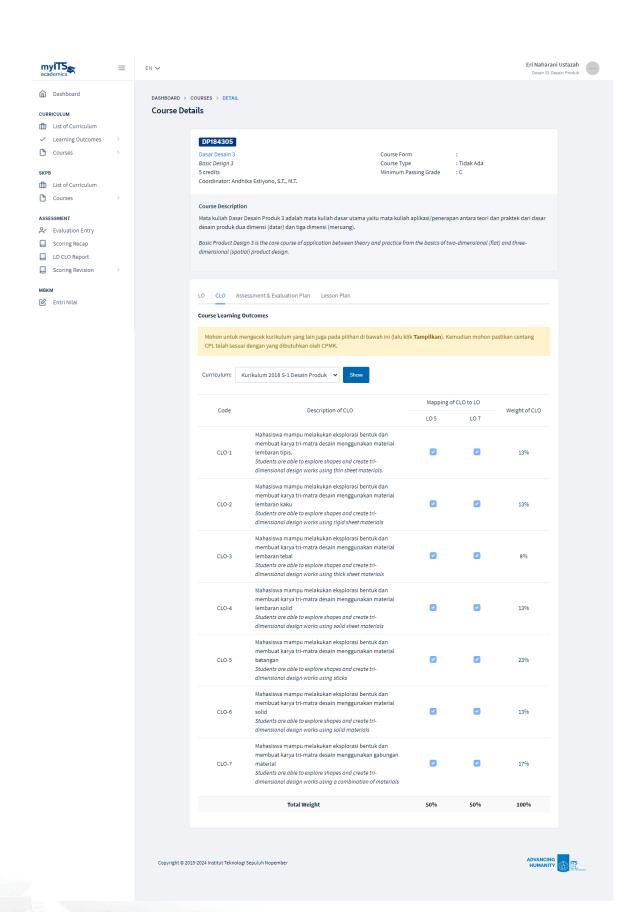
Course unit title	Design Basics 3
Course unit code	DP184305
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	2 <sup>nd</sup> year
Semester/trimester when the course unit is delivered	3 <sup>st</sup> semester
Number of ECTS credits allocated	8 ECTS Credits
Name of lecturer	Andhika Estiyono, S.T., M.T.
Learning outcomes of the course unit	Students are capable of exploring forms and creating three-dimensional design works using various materials: 1. Utilizing thin sheet materials 2. Utilizing rigid sheet materials 3. Utilizing thick sheet materials 4. Utilizing solid sheet materials 5. Utilizing rod materials 6. Utilizing solid materials 7. Utilizing a combination of materials
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	The Design Basics 3 is a fundamental core course, specifically an applied course that bridges theory and practice, building upon the principles of twodimensional (flat) and three-dimensional (spatial) product design.  1) Introduction to the characteristics of natural and artificial materials that will impact form, such as: Sheets, rods, strands/wires, powder/flour (plaster, sand, cement), lumps (clay, wax), liquid (resin). 2) Introduction to various simple manual tools: hammer, screwdriver, pliers, saw, drill, rasp. 3) Application of tasks related to composition/application of twodimensional aesthetic theories: lines, planes, lines and planes, shape changes, color gradation, form unity, etc., on product
	objects, as well as application of aesthetic theories: harmony, rhythm, form unity, shape and color

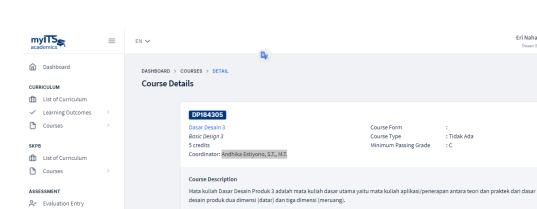
	gradation, etc. 4) Application of tasks related to three-dimensional or spatial aesthetic theories: lines, planes, lines and planes, shape changes, color gradation, form unity, etc., on product objects, as well as application of aesthetic theories: harmony, rhythm, form unity, shape and color gradation, etc. 5) Practice applying aesthetics/form unity in 3D on two-dimensional media such as products: Automotive, furniture, street furniture, household items, etc. 6) Practice applying aesthetics/form unity in 3D on three-dimensional media such as products: Lampshades, household items, partitions/dividers, etc.
Recommended or required reading and other learning resources/tools	<ul> <li>Bielefeld, Basic Design Ideas, Boston, Springer, 2007</li> <li>Lidwell, William, Universal Principles of Design, USA: Rockport Publishers, 2003</li> <li>Kimberly, Elam, 2001, Geometry of design, studies ini Proportion and composition, Princeton Architectural Press, 37 East 7th Street, New York, new York 10003</li> <li>Lawson, Bryan, How Designers Think, London, The Architectural Press Ltd</li> <li>Williams, Christopher, Origin Form, New York, Architectural Book Publishing Company, 1981</li> </ul>
Planned learning activities and teaching methods	Discovery Learning; Case Method
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

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dimensional (spatial) product design.

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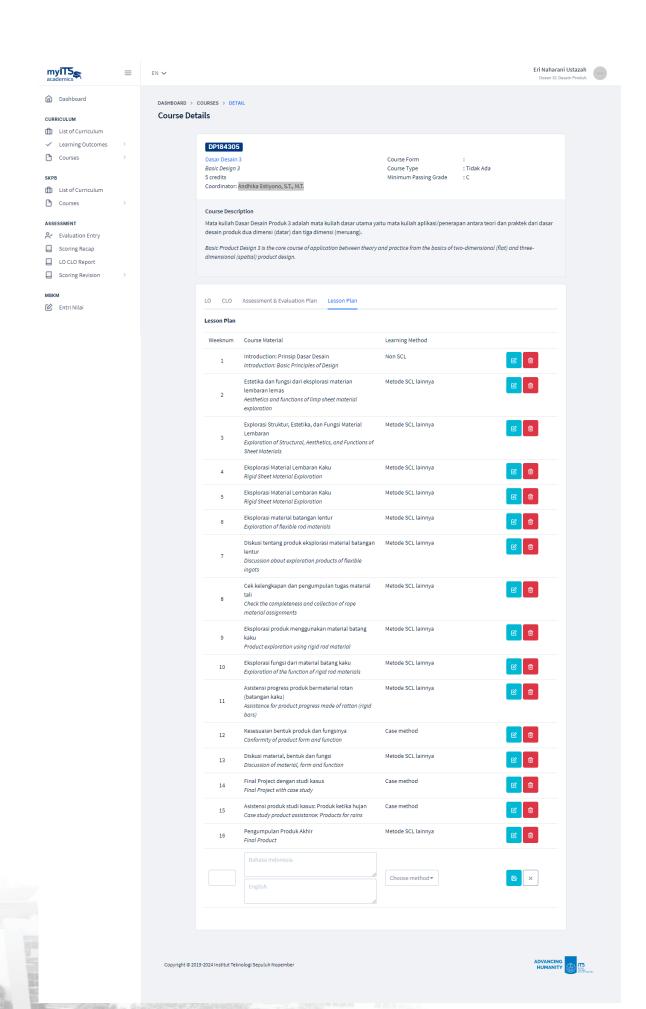
0	CLO Assessment & Evaluation Pla	n Less	on Plan						
ssess	sment & Evaluation Plan								
No.	Evaluation Plan	CLO-1	CLO-2	CLO-3	CLO-4	CLO-5	CLO-6	CLO-7	Total Weight
1	Makalah Analisis Estetika Aesthetic Analysis Paper Studi Kasus   Case Method	1%	1%	1%	196	1%	1%	1%	796
2	Struktur kertas Paper Structure Studi Kasus   Case Method	10%	0%	0%	096	0%	0%	0%	10%
3	Fungsi Struktur: Penyangga Laptop Structure Function: Product support Studi Kasus   Case Method	0%	0%	0%	10%	0%	5%	0%	15%
4	Eksplorasi Material Batang Lentur Exploration of Bending Rod Material Studi Kasus   Case Method	0%	0%	0%	0%	10%	0%	8%	18%
5	Material Knowledge: Batang Kaku Material Knowledge: Rigid Rod Studi Kasus   Case Method	0%	0%	0%	096	5%	5%	0%	10%
6	Eksplorasi Material Batang Kaku Rigid Rod Material Exploration Studi Kasus   Case Method	0%	5%	0%	096	5%	0%	5%	15%
7	Review Produk Eksisting-Bentuk & Fungsi Existing Product Review-Form & Function Studi Kasus   Case Method	0%	5%	5%	096	0%	0%	0%	10%
8	Eksplorasi Produk Studi Kasus Case Study Product Exploration Studi Kasus   Case Method	2%	2%	2%	2%	2%	2%	3%	15%
	<b>TOTAL</b> Target	13% 13%	13% 13%	<b>8%</b> 8%	13% 13%	23% 23%	13% 13%	17% 17%	<b>100%</b> 100%

 $Basic\ Product\ Design\ 3\ is\ the\ core\ course\ of\ application\ between\ theory\ and\ practice\ from\ the\ basics\ of\ two-dimensional\ (flat)\ and\ three-leaving\ product\ produ$ 

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Eri Naharani Ustazah





# Drawing 3 DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023

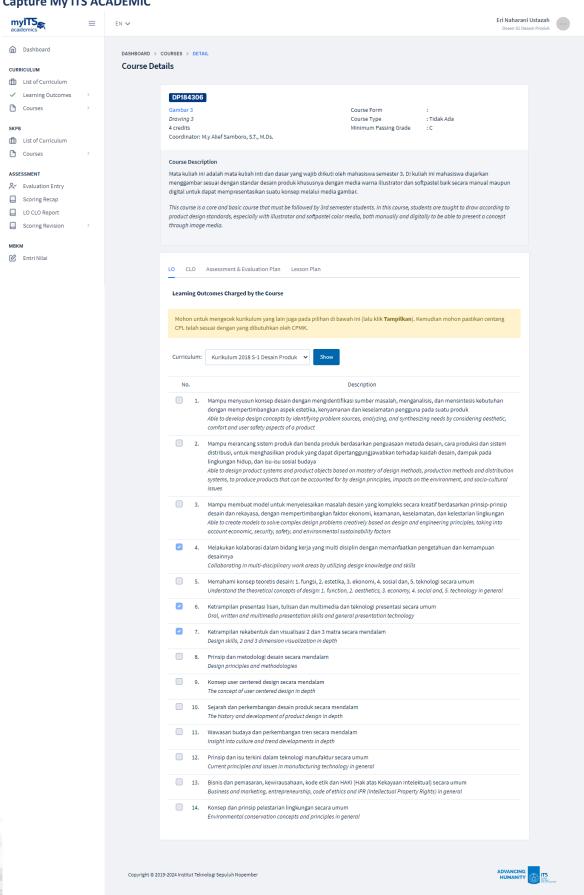
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

Course unit title	Drawing 3
Course unit code	DP184306
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	2 <sup>nd</sup> year
Semester/trimester when the course unit is delivered	3 <sup>rd</sup> semester
Number of ECTS credits allocated	6,4 ECTS Credits
Name of lecturer	M.y Alief Samboro, S.T., M.Ds.
Learning outcomes of the course unit	<ol> <li>Oral, written and multimedia presentation skills and general presentation technology</li> <li>Deep 2 and 3 dimension design and visualization skills</li> </ol>
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	This course is a core and fundamental subject mandatory for third-semester students. In this course, students are taught drawing in accordance with product design standards, particularly using Illustrator and soft pastels as media
	1) Hatching and pen lines 2) Illustrator rendering 3) Soft pastel rendering 4) Orderliness in rendering 5) Rendering according to material 6) Rendering according to the proportions of form (contour) and construction 7) Sketch duration
Recommended or required reading and other learning resources/tools	<ul> <li>Pipes, Alan, "Drawing for Designer", Laurence King Publishers, 2007</li> <li>Erik Olofsson &amp; Klara Sjölén, "Design Sketching", KEEOS Design Books, Sweden, 2005</li> <li>Eissen, Koos, &amp; Steur, Roselien, "Sketching: Drawing Technique for Product Designer", Bis Publisher, 2009</li> </ul>

	<ul> <li>Powell, Dick, "Presentation Techniques: A Guide to Drawing and Presenting Design Ideas", Little, Brown, 1990</li> <li>Waluyohadi, "Gambar Bentuk dan Suasana", Butawarna Publishing, 2015</li> </ul>
Planned learning activities and teaching methods	Discovery Learning; Case Study
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

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List of Curriculum

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A Evaluation Entry

Scoring Recap LO CLO Report

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#### Course Details

DP184306

Course Form Drawing 3 4 credits Course Type Minimum Passing Grade Coordinator: M.y Alief Samboro, S.T., M.Ds.

#### Course Description

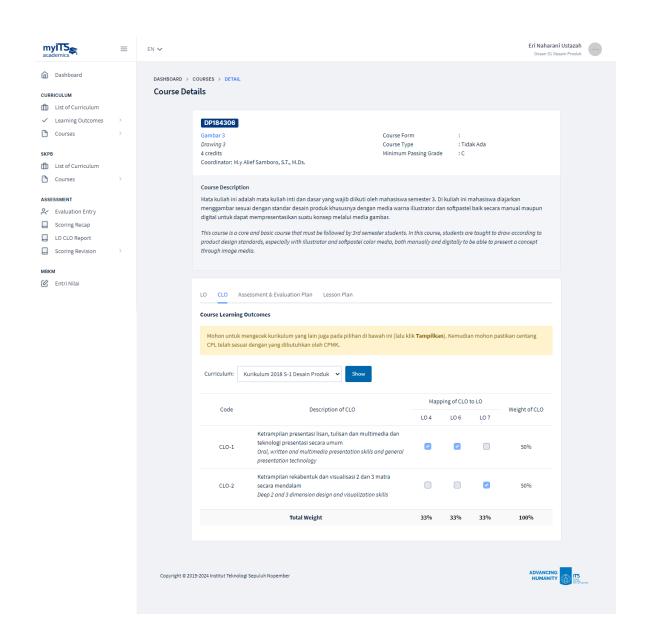
Mata kullah ini adalah mata kullah inti dan dasar yang wajib diikuti oleh mahasiswa semester 3. Di kullah ini mahasiswa diajarkan menggambar sesuai dengan standar desain produk khususnya dengan media warna illustrator dan softpastel baik secara manual maupun digital untuk dapat mempresentasikan suatu konsep melalui media gambar.

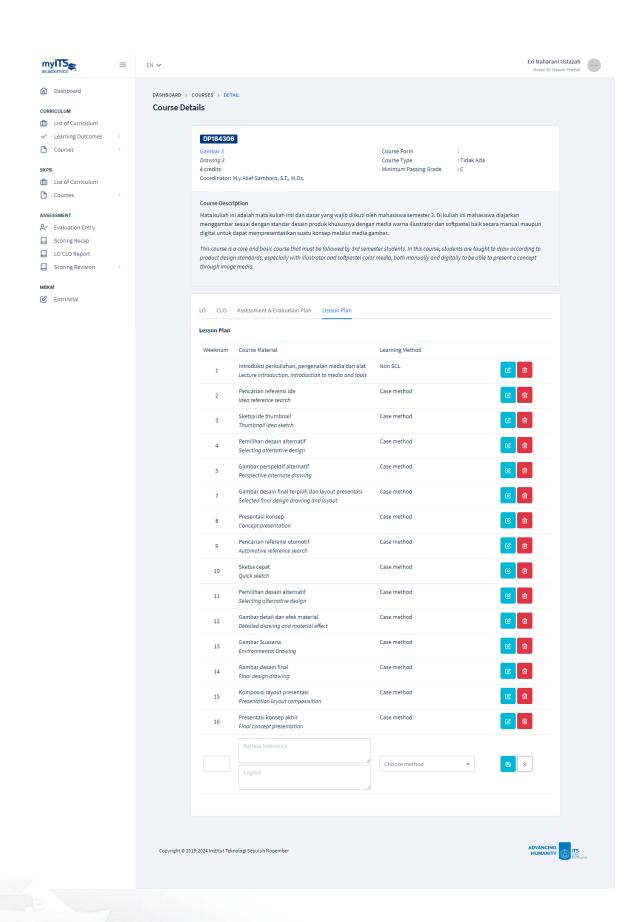
This course is a core and basic course that must be followed by 3rd semester students. In this course, students are taught to draw according to product design standards, especially with illustrator and softpastel color media, both manually and digitally to be able to present a concept through image media.

O CLO Assessment & Evalua	ation Plan Lesson Plan		
sessment & Evaluation Plan			
No. Evaluation Plan	CLO-1	CLO-2	Total Weight
1 Gambar Thumbnail Ide Idea Thumbnail Drawing Studi Kasus   Case Method	5%	0%	5%
2 Gambar Alternatif Desain Alternative Design Drawing Studi Kasus   Case Method	10%	0%	10%
3 Gambar Operasional dan E Explofe and Operational Dro Studi Kasus   Case Method		096	10%
4 Gambar Presentasi Konsep Terpilih Selected Concept Presentati Drawing Kognitif - UTS   Cognitive - M Exam	o%	25%	25%
5 Gambar Sketsa Cepat Ide Idea Quick Sketch Drawing Studi Kasus   Case Method	5%	0%	596
6 Gambar Suasana Environmental Drawing Studi Kasus   Case Method	10%	0%	10%
7 Gambar Detail Detailed Drawing Studi Kasus   Case Method	10%	0%	10%
8 Presentasi Konsep Terpilih Selected Concept Presentat Kognitif - UAS   Cognitive - F Exam		2596	25%
TOTAL	50%	50%	100%

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# Design History DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



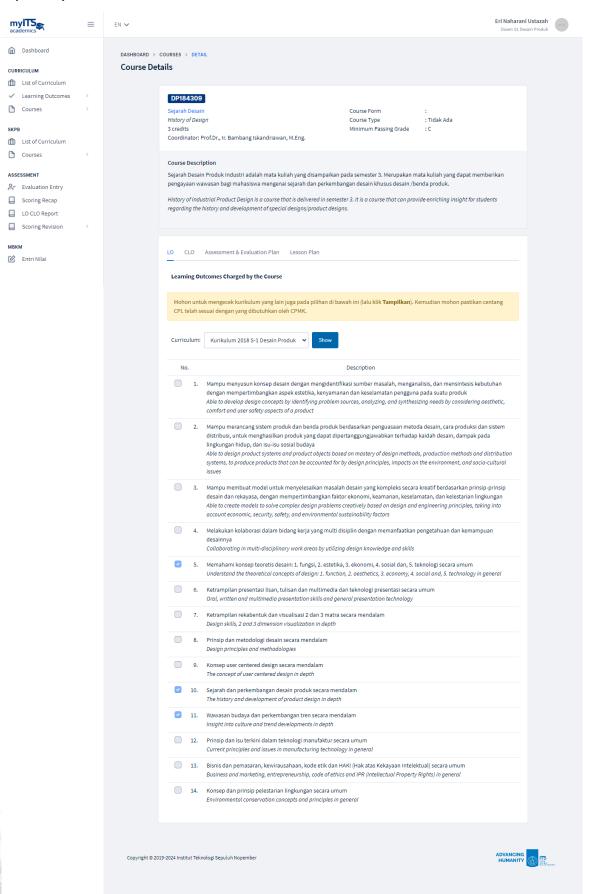
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

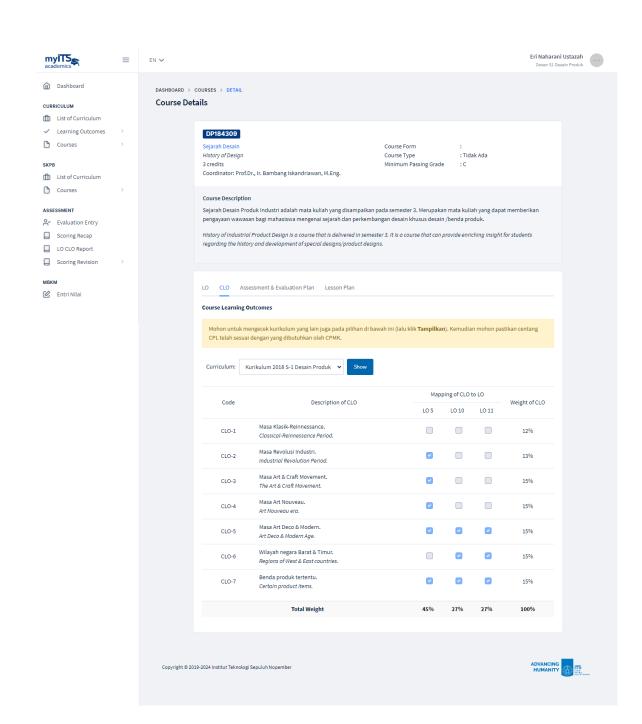
Course unit title	Design History
Course unit code	DP184309
Course unit code	DP 164309
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	2 <sup>nd</sup> year
Semester/trimester when the course unit is delivered	3 <sup>rd</sup> semester
Number of ECTS credits allocated	4,8 ECTS Credits
Name of lecturer(s)	Prof.Dr., Ir. Bambang Iskandriawan, M.Eng.
Learning outcomes of the course unit	Students can comprehensively explain the development of design in the following periods:  1. Classical-Renaissance Period  2. Industrial Revolution Period  3. Art & Craft Movement Period  4. Art Nouveau Period  5. Art Deco & Modern Period  6. Western & Eastern Regions  7. Specific product items
Mode of delivery (face-to-face, distance learning)	face-to-face
Prerequisites and co-requisites (if applicable)	-
Course content	The History of Industrial Product Design is a course offered in the third semester. It is a course that provides enrichment for students' insights into the history and development of industrial product design, serving as a reference for the design course
	1) Background, development, figures, and characteristics of design styles in the Classical-Renaissance Period 2) Background, development, figures, and characteristics of design styles in the Industrial Revolution Period 3) Background, development, figures, and characteristics of design styles in the Art & Craft
	Movement Period 4) Background, development, figures, and characteristics of design styles in the Art Nouveau

	Dariod
Recommended or required	Period 5) Background, development, figures, and characteristics of design styles in the Art Deco Period 6) Background, development, figures, and characteristics of design styles in the Modern Period 7) Background, development, figures, and characteristics of design styles in Europe 8) Background, development, figures, and characteristics of design styles in America 9) Background, development, figures, and characteristics of design styles in Asia 10) Development of shoe product forms 11) Development of radio product forms 12) Development of camera product forms 13) Development of bicycle product forms 14) Development of train product forms 15) Development of train product forms
reading and other learning resources/tools	Movements and Styles for Contemporary Design, Singapore: Page One Publishing, 2005  • Bürdek, Bernhard E., Design History, Theory and Practice of Product Design, Birkhäuser, 2005  • Davis, Adam Hart, History The Definitive Visual Guide, DK Publishing, 2012  • History of The World in 1000 Objects, DK Publishing, 2014  • Zakzek, Ian, Art Deco, Singapore, Paragon Book, 2002.
Planned learning activities and	Discovery Learning; Case Method; Team Based
teaching methods	Learning
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Presentation, Midterm Evaluation and Final Evaluation

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CURRICULUM

COURSE Details

List of Curriculum

Learning Outcomes > Sejs

KPB

List of Curriculum

Coorses > Coorses

ASSESSMENT

DASHBOARD > COURSE

COURSE Details

Course Details

Course Details

Evaluation Entry

Scoring Recap

LO CLO Report

Scoring Revision

Entri Nilai

 DP184309

 Sejarah Desain
 Course Form
 : Sejarah Desain

 History of Design
 Course Type
 : Tidak Ada

 3 credits
 Minimum Passing Grade
 : C

 Coordinator: Prof.Dr., Ir. Bambang Iskandriawan, M.Eng.

Course Description

Sejarah Desain Produk Industri adalah mata kuliah yang disampaikan pada semester 3. Merupakan mata kuliah yang dapat memberikan pengayaan wawasan bagi mahasiswa mengenai sejarah dan perkembangan desain khusus desain /benda produk.

History of Industrial Product Design is a course that is delivered in semester 3. It is a course that can provide enriching insight for students regarding the history and development of special designs/product designs.

LO CLO Assessment & Evaluation Plan Lesson Plan Assessment & Evaluation Plan CLO-1 CLO-2 CLO-3 CLO-4 CLO-5 CLO-6 CLO-7 Weight 1 Presentasi 1. Presentation 1. Studi Kasus | Case Method 2 Presentasi 2 Presntation 2. Studi Kasus | Case Method 3 Evaluasi 1. Studi Kasus | Case Method 4 Evaluasi 2. Studi Kasus | Case Method **12% 13% 15% 15%** 1296 1396 1596 1596 15% TOTAL 15% 15% Target

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List of Curriculum

Learning Outcomes >
Courses >

List of Curriculum

Courses >

A Evaluation Entry

Scoring Recap

LO CLO Report Scoring Revision

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DASHBOARD > COURSES > DETAIL

## Course Details

## DP184309

Sejarah Desain History of Design 3 credits Coordinator: Prof.Dr., Ir. Bambang Iskandriawan, M.Eng. Course Form Course Type Minimum Passing Grade : : Tidak Ada : C

Sejarah Desain Produk Industri adalah mata kuliah yang disampaikan pada semester 3. Merupakan mata kuliah yang dapat memberikan pengayaan wawasan bagi mahasiswa mengenal sejarah dan perkembangan desain khusus desain / benda produk.

History of Industrial Product Design is a course that is delivered in semester 3. It is a course that can provide enriching insight for students regarding the history and development of special designs/product designs.

LO CLO	Assessment & Evaluation Plan Lesson Plan	
Lesson Plan		
Weeknum	Course Material	Learning Method
1	Latar belakang, perkembangan, tokoh dan karakteristik gaya desain masa Klasik-Reinnessance. Background, development, character and design style characteristics of the Classical-Reinnessance period.	Case method ②
2	Latar belakang, perkembangan, tokoh dan karakteristik gaya desain masa Revolusi Industri. Background, development, character and design style characteristics of the Industrial Revolution.	Case method   ©
3	Latar belakang, perkembangan, tokoh dan karakteristik gaya desain masa Desain Art & Craft Movement. Bockground, development, character and design style characteristics of the Design Art & Craft Movement.	Case method
4	Latar belakang, perkembangan, tokoh dan karakteristik gaya desain masa Art Nouveau. Background, development, character and design style characteristics of the Art Nouveau era.	Case method ②
5	Latar belakang, perkembangan, tokoh dan karakteristik gaya desain masa Art Deco. Bockground, development, character and design style characteristics of the Art Deco period.	Case method
6	Latar belakang, perkembangan, tokoh dan karakteristik gaya desain masa Modern. Background, development, character and characteristics of modern design style.	Case method ②
7	Latar belakang, perkembangan, tokoh dan karakteristik gaya desain di Eropa. Background, development, character and characteristics of design style in Europe.	Case method
8	Latar belakang, perkembangan, tokoh dan karakteristik gaya desain di Amerika, Background, development, character and characteristics of design style in America.	Case method © ©
9	Latar belakang, perkembangan, tokoh dan karakteristik gaya desain di Asia. Background, development, character and characteristics of design styles in Asia.	Team-based project
10	Perkembangan bentuk benda produk sepatu. The development of the shape of the shoe product.	Team-based project
11	Perkembangan bentuk benda produk radio. The development of the shape of radio product objects.	Team-based project
12	Perkembangan bentuk benda produk kamera. The development of the shape of the camera product.	Team-based project
13	Perkembangan bentuk benda produk sepeda. The development of the shape of bicycle products.	Team-based project
14	Perkembangan bentuk benda produk mobil The development of the shape of the object of the car product.	Team-based project
15	Perkembangan bentuk benda produk kereta. The development of the shape of the train product.	Team-based project
16	Evaluasi dan review.  Evaluation and review	Team-based project
	Bahasa Indonesia	Choose method ▼
	English	



# Design Methodology DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023

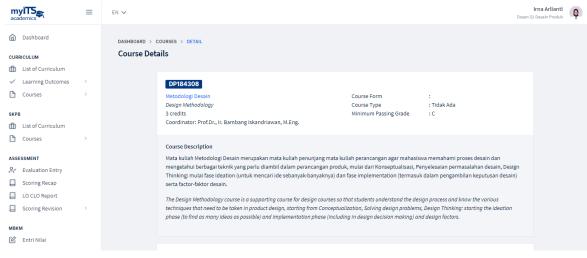
## <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

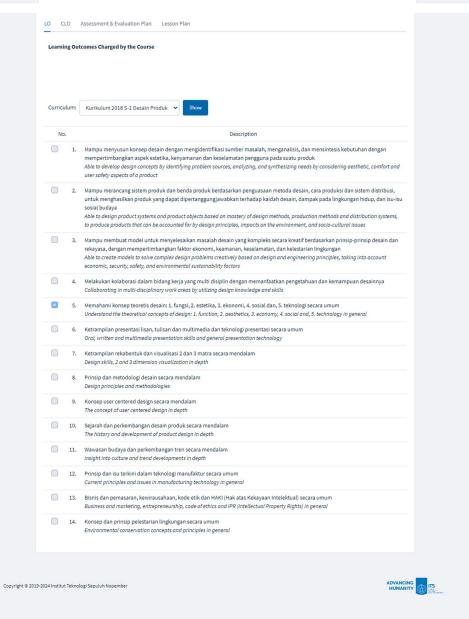
Course unit title	Design Methodology
Course unit code	DP184308
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	2nd year
Semester/trimester when the course unit is delivered	3st semester
Number of ECTS credits allocated	4,8 ECTS Credits
Name of lecturer	Prof.Dr., Ir. Bambang Iskandriawan, M.Eng.
Learning outcomes of the course unit	<ol> <li>Students understand the steps to develop a design concept by identifying the source of the problem, analyzing, and synthesizing needs by considering the aesthetic, comfort and safety aspects of the user in a product.</li> <li>Students understand the steps of communicating design concepts and specifications including the ability to: (1) present designs orally, in writing, and multimedia in the form of abstractions and visuals, in detail their functions (2) able to apply technology and equipment related to design representation in a multi-faceted manner. dimensional (2D and 3D), in design development</li> <li>Students understand the steps to collaborate in a multi-disciplinary field of work by utilizing their knowledge and design skills</li> <li>Students understand the theoretical concepts of design based on function, aesthetics, economy, social and technology in general.</li> <li>Students understand design principles and methodologies</li> <li>Students understand the concept of user centered design</li> </ol>
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	The Design Basic 1 is a course delivered in the first semester, a core subject alongside Drawing 1. It is an integrated course combining theory and practical exercises in the aesthetics of dual-matrix design, serving as the foundation for new students in

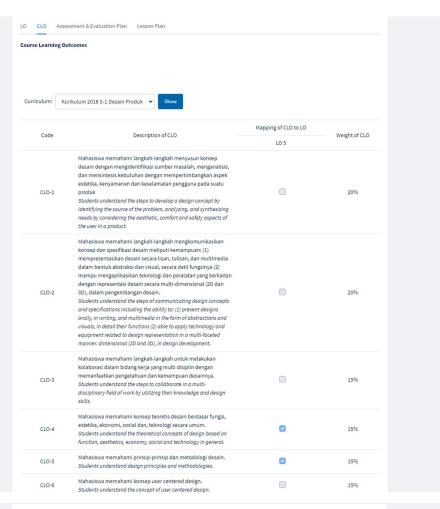
Recommended or required reading and other learning resources/tools	preparation for advanced design courses in subsequent levels. The student is capable of creating dual-matrix design works encompassing:  1. Line composition 2. Plane composition 3. Color plane composition 4. Changing plane composition 5. Geometric pattern composition 6. Organic pattern composition 7. Texture plane composition  • Bielefeld, Basic Design Ideas, Boston, Springer, 2007  • Ching, F. D., Architecture: Form, space, and order. John Wiley & Sons. 2014  • Irawan, Bambang & Priscilla T., Dasar-dasar Desain. Jakarta: Griya Kreasi, 2013  • Masri, Andry., Strategi Visual-Bermain dengan Formalistic dan Semiotic untuk Menghasilkan Kualitas Visual dalam Desain. Yogyakarta: Jalasutra, 2012  • Wong, Wucius, Beberapa Asaa Merancang Dwimatra. Bandung: Penerbit ITB, 1986  Case method; Project Based Learning; Team Based	
Planned learning activities and teaching methods	Case method; Project Based Learning; Team Based Learning	
Language of instruction	Indonesia and English	
	Assignment, Project, Midterm Evaluation and Final Evaluation, Design Method Portfolio	

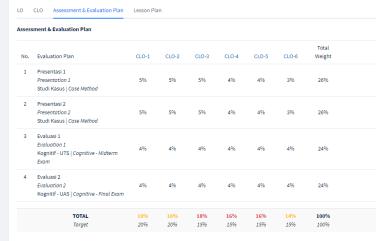
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# Technical Drawing DESCRIPTION OF COURSE UNIT

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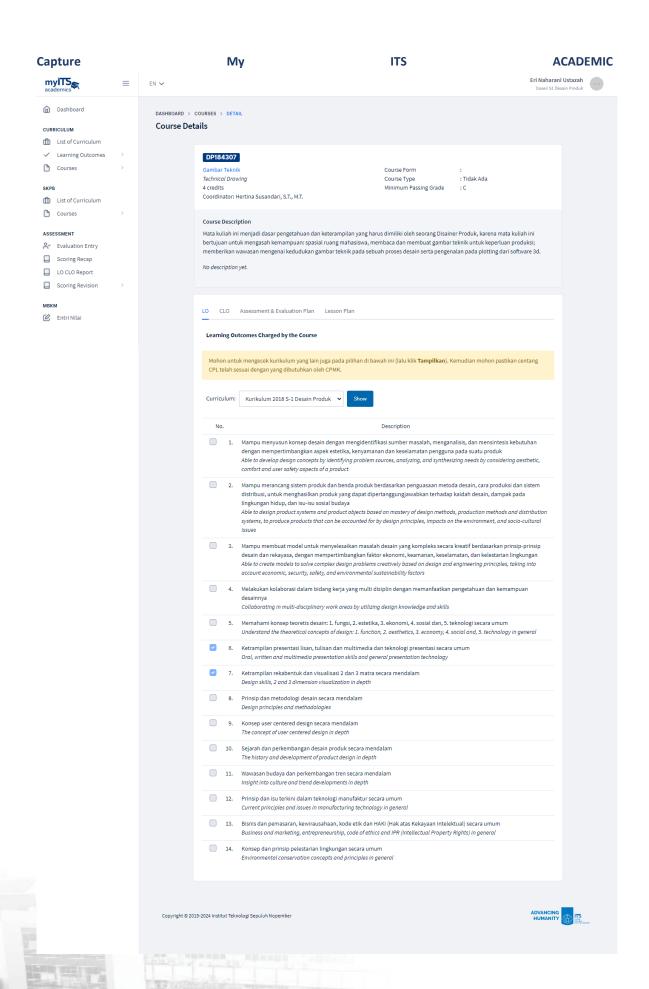


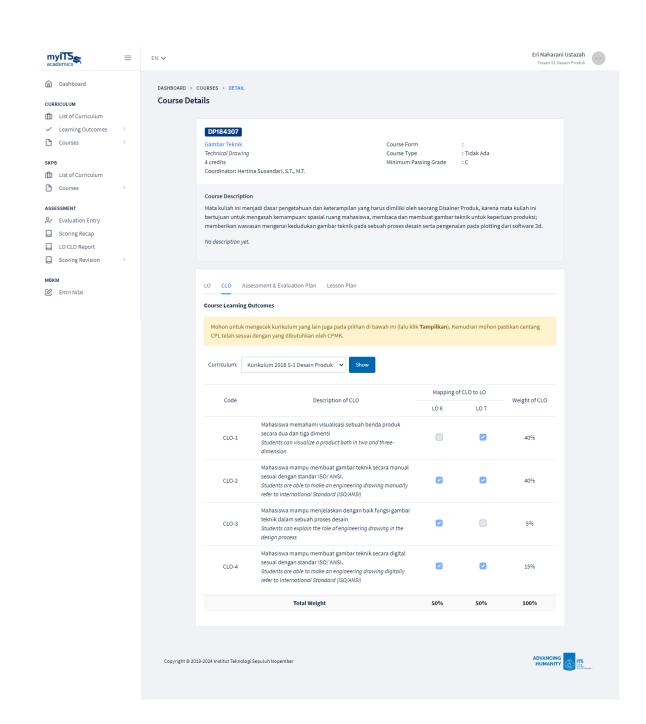
## <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

Course unit title	Technical Drawing
Course unit code	DP184307
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	2 <sup>nd</sup> year
Semester/trimester when the course unit is delivered	3 <sup>rd</sup> semester
Number of ECTS credits allocated	6,4 ECTS Credits
Name of lecturer	Hertina Susandari, S.T., M.T.
Learning outcomes of the course unit	<ol> <li>Students can visualize a product both in two and three-dimension</li> <li>Students are able to make an engineering drawing manually refer to International Standard (ISO/ANSI)</li> <li>Students can explain the role of engineering drawing in the design process</li> <li>Students are able to make an engineering drawing digitally refer to International Standard (ISO/ANSI)</li> </ol>
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	This course serves as the foundation for knowledge and skills that a Product Designer must possess. The aim of this course is to sharpen students' spatial abilities, enable them to read and create production-ready product drawings, provide insights into the role of technical drawings in the design process, and introduce them to rapid prototyping.
	<ol> <li>Compound projections and auxiliary views</li> <li>Single-view projections</li> <li>Sections</li> <li>Detail drawings</li> <li>Dimension notations and hatching</li> <li>Exploded views</li> </ol>
10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7) Component drawings

	8) Material specifications
	9) CAD and rapid prototyping
Recommended or required reading and other learning resources/tools	Bertoline, Gary R, 2002, Introduction to Graphic Communications for Engineers, Edisi ke-2, Mc Graw Hill, New York
	• Giesecke, Frederick E, 2001, Gambar Teknik (Jilid 1), Penerbit Erlangga, Jakarta
	• Giesecke, Frederick E, 2001, Gambar Teknik (Jilid 2), Penerbit Erlangga, Jakarta
Planned learning activities and	Discovery Learning; Project Based Learning; Team
teaching methods	Based Learning
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

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List of Curriculum ✓ Learning Outcomes

Courses

SKPB

List of Curriculum

Courses

ASSESSMENT

A Evaluation Entry

Scoring Recap LO CLO Report

Scoring Revision

Entri Nilai

DASHBOARD > COURSES > DETAIL

Course Details

DP184307

Technical Drawing Coordinator: Hertina Susandari, S.T., M.T. Course Form Course Type Minimum Passing Grade : Tidak Ada

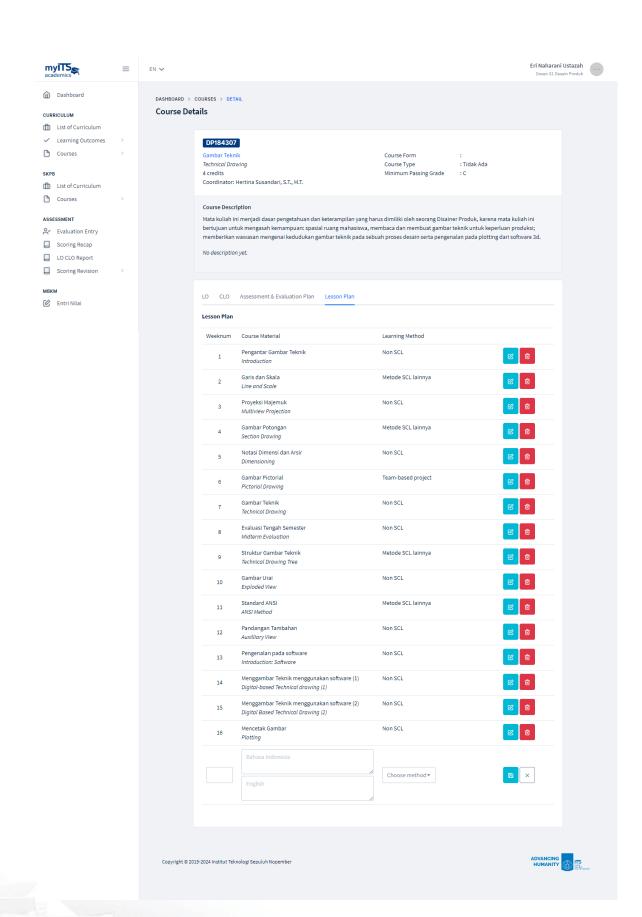
Course Description

Mata kuliah ini menjadi dasar pengetahuan dan keterampilan yang harus dimiliki oleh seorang Disainer Produk, karena mata kuliah ini bertujuan untuk mengasah kemampuan: spasial ruang mahasiswa, membaca dan membuat gambar teknik untuk keperluan produksi; memberikan wawasan mengenai kedudukan gambar teknik pada sebuah proses desain serta pengenalan pada plotting dari software 3d.

LO CLO Assessment & Evaluation Plan Lesson Plan Assessment & Evaluation Plan Weight 1 Proyeksi Majemuk Multiview Projection Kognitif - Tugas | Cognitive -2 Gambar Potongan Section Drawing Kognitif - Tugas | Cognitive -Assignment 3 Gambar Piktorial Pictorial Drawing Hasil proyek | Team-based Project 196 096 5% 4 Evaluasi Tengah Semester Midterm Examination
Kognitif - UTS | Cognitive -Midterm Exam 5 Gambar Kerja Produk Furnitur Technical Drawing - Furniture Product Hasil proyek | Team-based Project 6 Tugas Besar Final Exam Hasil proyek | Team-based Project 15% TOTAL 15% 100%

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## 4th SEMESTER

Bachelor of Industrial Design (BOID)





# Product Design 1 DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023

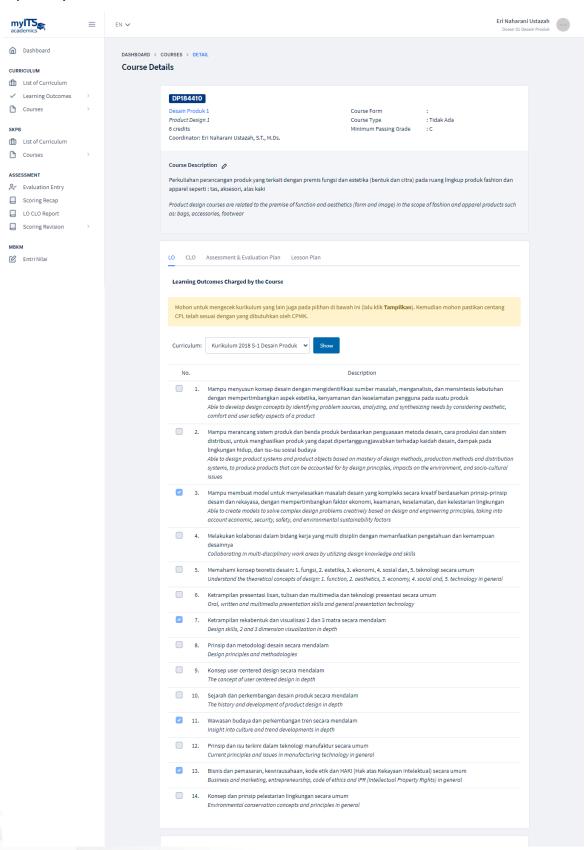
## <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

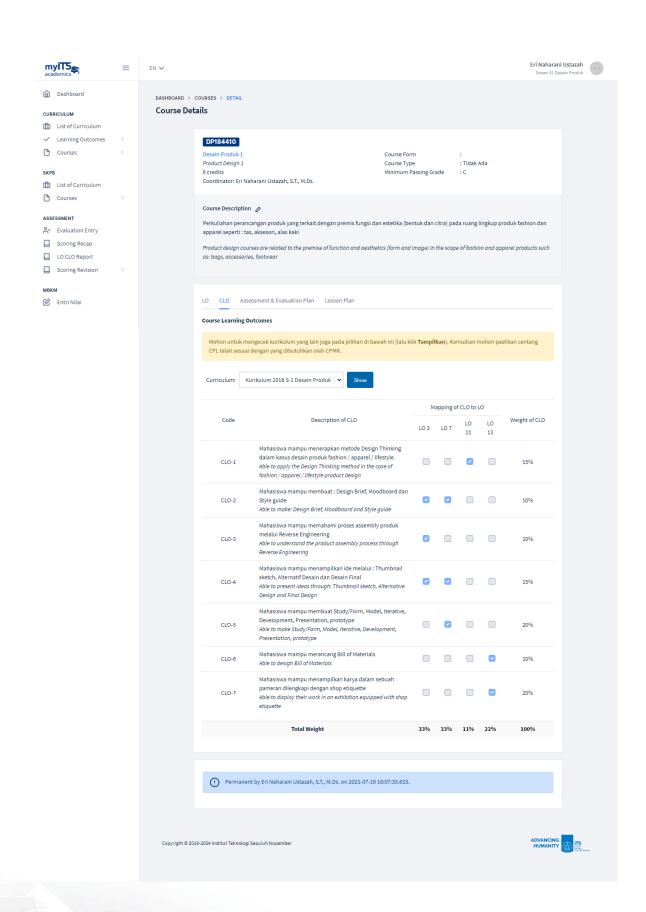
Course unit title	Product Design 1
	22/04/40
Course unit code	DP184410
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	2 <sup>nd</sup> year
Semester/trimester when the course unit is delivered	4 <sup>th</sup> semester
Number of ECTS credits allocated	9,6 ECTS Credits
Name of lecturer	Eri Naharani Ustazah, S.T., M.Ds.
Learning outcomes of the course unit	<ol> <li>Students can apply the Design Thinking method in the case of fashion/apparel product design.</li> <li>Students can create a Design Brief, Moodboard, and Style Guide.</li> <li>Students can understand the product assembly process through Reverse Engineering.</li> <li>Students can present ideas through Thumbnail sketches, Design Alternatives, and Final Designs.</li> <li>Students can create Study/Forms, Models.</li> <li>Students can perform iteration, development, and presentation of prototypes.</li> <li>Students can design a Bill of Materials (BOM).</li> <li>Students can showcase their work in an exhibition equipped with shop etiquette.</li> <li>face-to-face</li> </ol>
Mode of delivery	lace-to-race
Prerequisites and co-requisites	-
Course content	The product design course related to the premises of function and aesthetics (form and image) in the scope of fashion and apparel products such as bags, accessories, and footwear.
	<ol> <li>Introduction: history, figures &amp; works.</li> <li>Fundamental theory: design thinking, concepts, creative exploration, and character, model study, material, finishing.</li> <li>Design Brief: Image, inspiration, mood board, Style guide, Identify the Opportunity for a New Product.</li> </ol>
	4) Research: Perform Product Research (simple) &

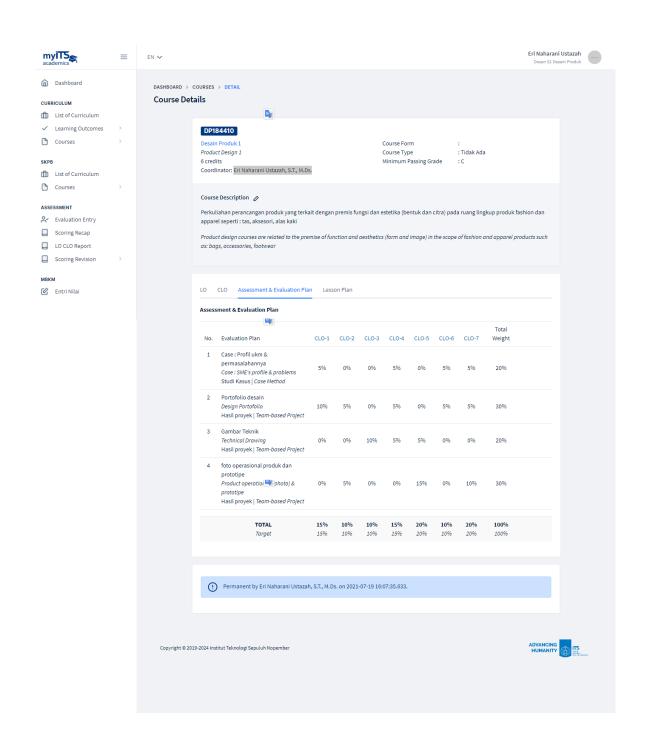
	<del>,</del>
	reverse Engineering. 5) Concept: Idea sketch, refine sketch, Thumbnail sketch, Design Alternatives, and Final Design. 6) Iteration: Create 3D Model, Study/Form, Model prototype. 7) Iteration: Development, Presentation prototype Bill of Materials, production, material & processes, shop etiquette.
Recommended or required reading and other learning resources/tools	<ul> <li>Burke, Sandra.2012.Fashion Designer-Concept to Collection. London: Burke publishing</li> <li>Charlotte &amp; Peter Fuell, Industrial Design A-Z, Taschen, 2000</li> <li>Charlotte &amp; Peter Fuell, Designing The 21st Century, Taschen, 2001</li> <li>Design Secrets: Products, Rocport Publisher. Inc., 2001</li> <li>Krome, Barrat, Logic and Design, George Godwin Ltd. 1980</li> </ul>
Planned learning activities and	Case Method; Project Based Learning; Team Based
teaching methods	Learning
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

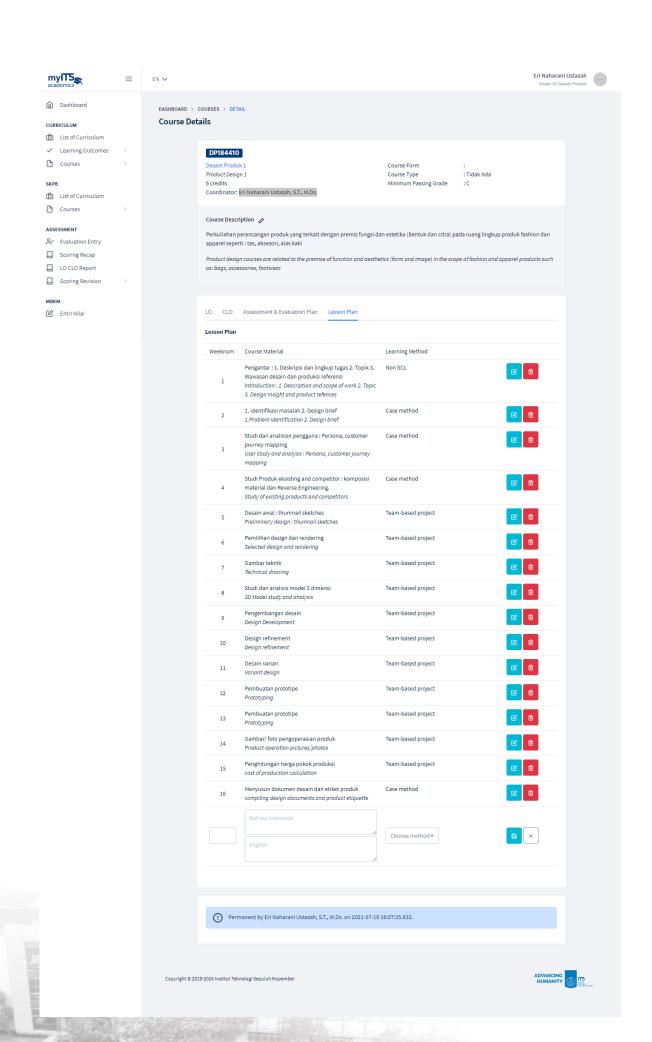
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# Computer Aided Design DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



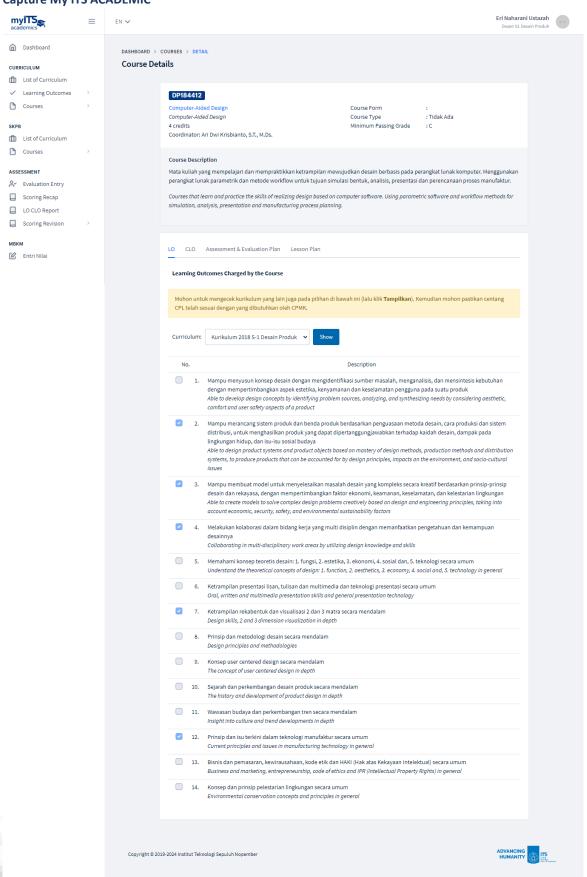
## <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

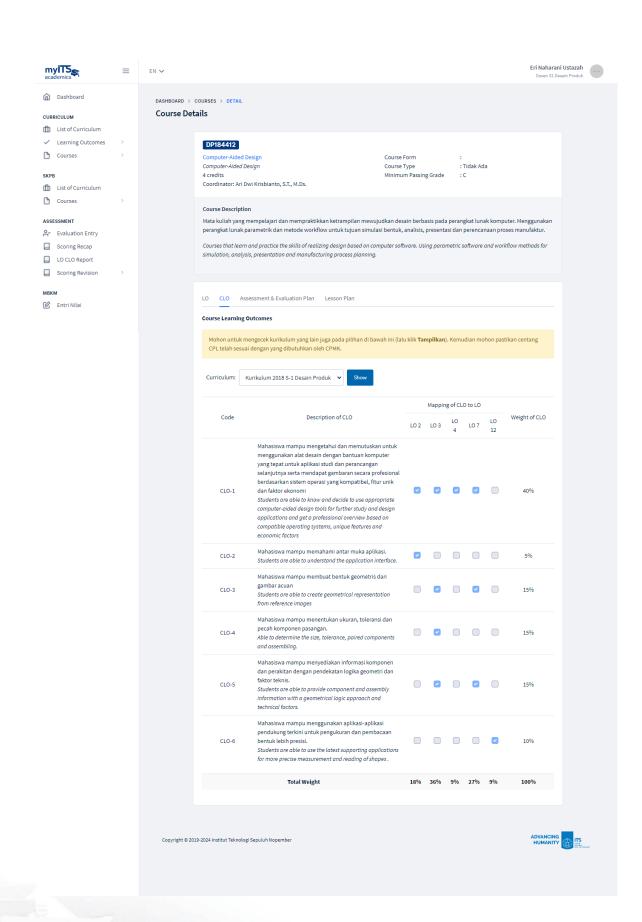
Course unit title	Computer Aided Design
Course unit code	DP184412
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	2 <sup>nd</sup> year
Semester/trimester when the course unit is delivered	4 <sup>st</sup> semester
Number of ECTS credits allocated	6,4 ECTS Credits
Name of lecturer	Ari Dwi Krisbianto, S.T., M.Ds.
Learning outcomes of the course unit	<ol> <li>Students can implement drawing organization using layer and color destination methods.</li> <li>Students can create detailed and complete attributes for drawings.</li> <li>Students can use basic commands for quick drawing</li> </ol>
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	This course delves into the deepening of knowledge and skills that must be possessed by a Product Designer. The purpose of this course is to implement spatial understanding in students, to read and create drawings for ready-toproduce products, provide insights into the role of technical drawings in the design process, and introduce rapid prototyping. The course also train students to produce digital working drawings using digital plotting methods.
	<ol> <li>Drawing organization using layer and color destination methods, as well as detailed and complete drawing attributes.</li> <li>Basic commands for quick drawing.</li> <li>Methods in object selection and object snap facilities in the drawing process.</li> <li>Coordinates and unit measures as reference for drawing sheets.</li> <li>Philosophy and interface of AutoCAD.</li> </ol>

Recommended or required reading and other learning resources/tools	<ul> <li>AutoCAD 2009, Autodesk Inc, copyright 2009</li> <li>AutoCAD 2008, Autodesk Inc, copyright 2008</li> </ul>
Planned learning activities and teaching methods	Case Method; Team Based Learning
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

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CURRICULUM

List of Curriculum

✓ Learning Outcomes Courses

ff List of Curriculum

ASSESSMENT

A Evaluation Entry

Scoring Recap ☐ LO CLO Report

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DASHBOARD > COURSES > DETAIL

Course Details

DP184412

Computer-Aided Design

Coordinator: Ari Dwi Krisbianto, S.T., M.Ds.

Course Type Minimum Passing Grade

: Tidak Ada

Course Form

Course Description

Mata kuliah yang mempelajari dan mempraktikkan ketrampilan mewujudkan desain berbasis pada perangkat lunak komputer. Menggunakan perangkat lunak parametrik dan metode workflow untuk tujuan simulasi bentuk, analisis, presentasi dan perencanaan proses manufaktur.

simulation, analysis, presentation and manufacturing process planning.

LO CLO Assessment & Evaluation Plan Lesson Plan Assessment & Evaluation Plan Total Weight 1 Tugas benchmarking aplikasi/software Assignment: Software benchmarkina Kognitif - Tugas | Cognitive -Assignment 2 Primitif dan ekstrusi Studi Kasus | Case Method 3 Proses surface Surfacing process Studi Kasus | Case Method 4 Fitur khusus: Surface flattening Special feature: Surface flattening Studi Kasus | Case Method Reverse Engineering: Pengukuran langsung Reverse engineering: Direct 0% 1196 Studi Kasus | Case Method 6 Reverse engineering: Fotogrametri Reverse engineering: 10% Photogrammetry
Studi Kasus | Case Method 7 Video animasi produk Product animation
Hasil proyek | Team-based Project

15%

15%

15%

10%

100%

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TOTAL

Target



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Scoring Revision

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Entri Nilai

DASHBOARD > COURSES > DETAIL Course Details

DP184412		
Computer-Aided Design	Course Form	:
Computer-Aided Design	Course Type	: Tidak Ada
4 credits	Minimum Passing Grade	:C
Coordinator: Ari Dwi Krisbianto, S.T., M.Ds.		
Course Description		
Mata kuliah yang mempelajari dan mempraktikkan perangkat lunak parametrik dan metode workflow u		
Courses that learn and practice the skills of realizing simulation, analysis, presentation and manufacturin	, , , , , , , , , , , , , , , , , , , ,	etric software and workflow methods for

LO CLO Assessment & Evaluation Plan Lesson Plan Lesson Plan Weeknum Course Material Learning Method Introduksi: Membangun motivasi, pandangan dan C Ū 1 wawasan Introduction: Building motivation, views and insights Persiapan gambar (setting) Dimensi, 2D (unit, grid, C ū snaps...), add cut out holes, 3D (basic solid construction), operasi boolean

Drawing preparation (settings) Dimensions (unit, grid, snaps...), 2D(create lines, rad, part contours...), add cut out holes, 3D (basic solid construction), boolean operation Organisasi gambar. Olah bentuk primitif (primitive forms) dan transformasi gambar 2D menjadi 3D Case method C T Drawing organization. Primitive exploration and transform 2D shape into 3D Lines, surface exploration and reverse Case method Lines, surface exploration and reverse Solid geometry and transform Case method C i 5 Solid geometry and transform Analisis geometri Case method **6** Case method Surface geometry Fitur khusus (flatten surface, orient, flow along curve- Case method C û surface...) Special features (flatten surface, orient, flow along curve-surface...) Logika geometri, proses assembling, detail Case method C d 9 ometry logics, assembling process, details Aplikasi untuk render , render tools (preview, light, Team-based project material properties, drafting...) 10 Render engines, render tools (preview, light, material properties, drafting...) Gambar operasional dan urai. Reverse engineering Case method **吃** 🛈 melalui pengukuran nyata Operational drawing and explode. Reverse engineering by real measurements Reverse modeling (photogrammetry) **E** 12 Reverse modeling (photogrammetry) Animations, environments, supporting Team-based project C Û properties/parts 13 Animations, environments, supporting properties/parts Render animation settings Team-based project 14 Render animation settings Telaah ulang dari ideasi menuju persiapan Team-based project 15 manufaktur From sketch to production Animasi untuk proses operasional dan presentasi 16 Animations for operational processes and presentations a × Choose method





# Ergonomics DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



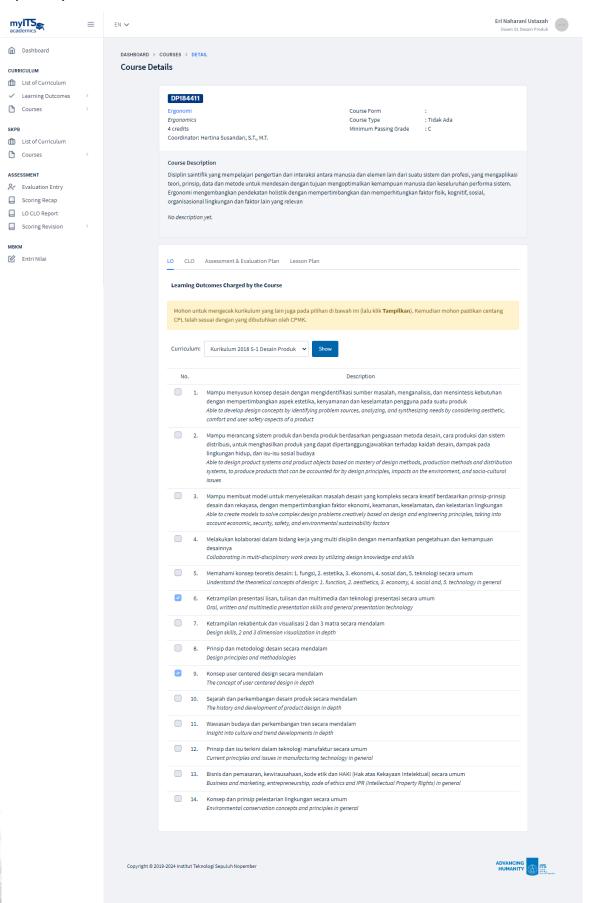
## <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

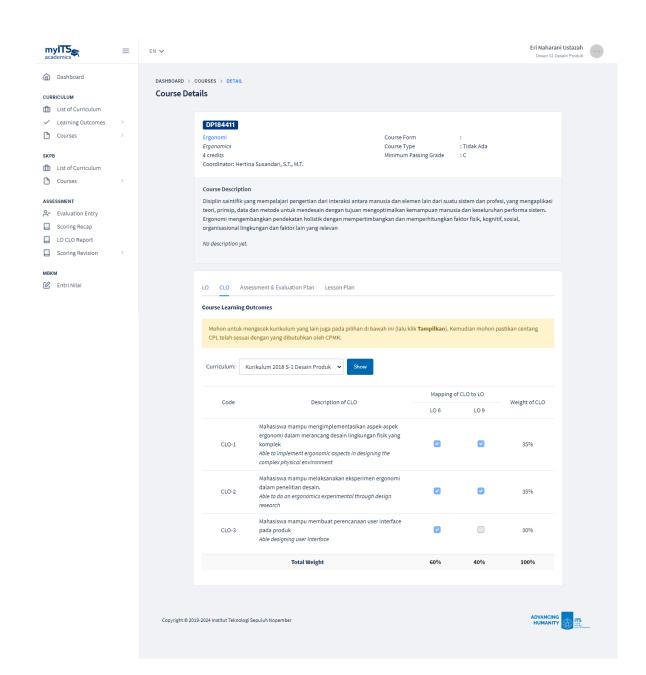
Course unit title	Ergonomics
Course unit code	DP184411
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	2 <sup>nd</sup> year
Semester/trimester when the course unit is delivered	4 <sup>th</sup> semester
Number of ECTS credits allocated	6,4 ECTS Credits
Name of lecturer	Hertina Susandari, S.T., M.T.
Learning outcomes of the course unit	<ol> <li>Students can implement ergonomic aspects in designing complex physical environments: workstations, cabins, etc.</li> <li>Students can conduct ergonomic experiments in design research.</li> <li>Students can create user interface plans for products.</li> </ol>
Mode of delivery (face-to-face, distance learning)	face-to-face
Prerequisites and co-requisites (if applicable)	-
Course content	Ergonomics is a scientific discipline that studies the understanding of interactions between humans and other elements of a system and a profession that applies theory, principles, data, and methods to design with the goal of optimizing human capabilities and the overall performance of the system. Ergonomics develops a holistic approach by considering and accounting for physical, cognitive, social, organizational, environmental factors, and other relevant factors.
	1) Scope of Ergonomics:  • Physical Ergonomics: anatomy and body posture of humans, anthropometry, biomechanics, and human physical characteristics.  • Cognitive Ergonomics: perception, memory, thinking, humanmachine interaction, reliability, work fatigue, and usability testing.  • Organizational Ergonomics: participatory design.

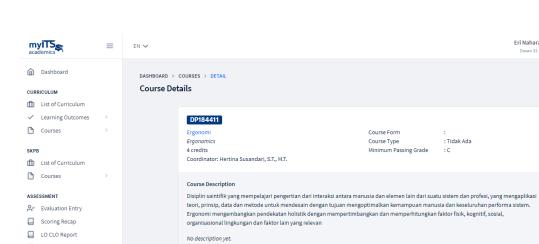
Recommended or required reading and other learning resources/tools	<ul> <li>2) Elements of Ergonomics:</li> <li>Characteristics of human perception (touch, sight, taste, smell, hearing) and their application in designing work environments.</li> <li>Anthropometry and its application to design subjects (design of workstations, public facilities, etc.).</li> <li>Biomechanics and its application to design subjects (design of hand tools, carrying aids, etc.)</li> <li>Grandjean E, Fitting the Task to The Man ;London:Taylor &amp; Francis Ltd,1982</li> <li>Wesley E. Woodson, Human Factor Design Handbook ;NewYork:McGraw Hill, 1981.</li> <li>Dumas, J.S., Redish, J.C., A Practical Guide to Usability Testing. Ablex, Norwood, NJ. 1994</li> <li>Preece, Jennifer;Rogers, Yvonne;Sharp, Helen.Interaction Design: beyond human-computer Interaction.New York: John Wiley&amp;Sons.Inc. (2002)</li> <li>Saffer, Dan. Designing for interaction: creating smart applications and clever device. USA: AIGA Design Press, 2007</li> <li>Han,Sung H; Yun, Myung Hwan; Kwahk, Jiyoung; Hong, Sang W.2001. "Usability of consumer electronic products". International Journal of Industrial Ergonomic.</li> </ul>
Diamentary	products". International Journal of Industrial Ergonomic. Vol.28, page 143-151
Planned learning activities and teaching methods	Study Case; Team Based Learning
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

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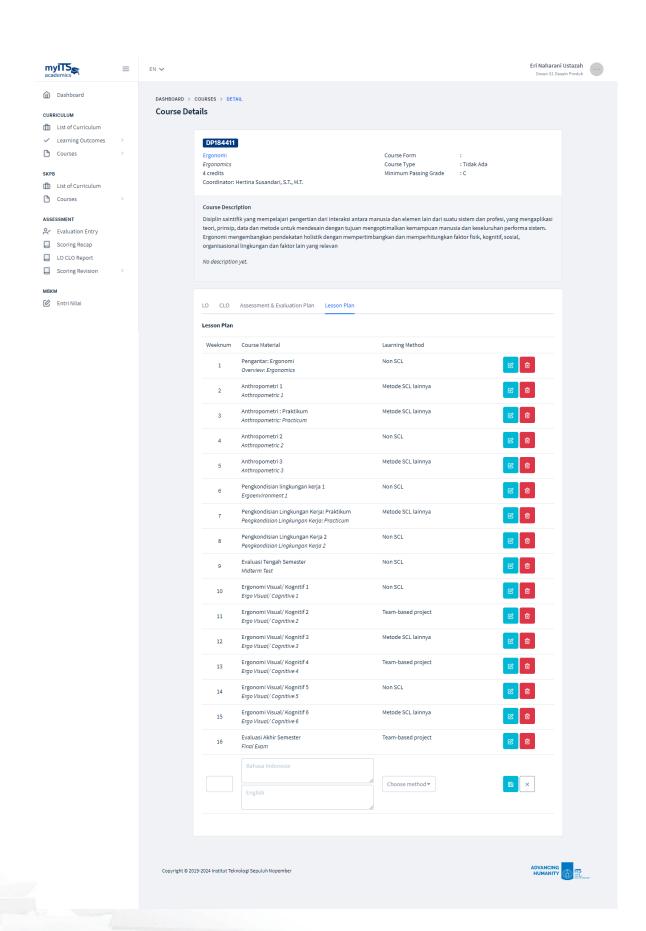
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ssessment & Evaluation Plan					
No.	Evaluation Plan	CLO-1	CLO-2	CLO-3	Total Weight
1	Tugas 1 (Ergonomi Fisik & lingkungan) Assigmt 1 (Physical & Environment Ergo) Studi Kasus   Case Method	17.5%	8.75%	0%	26.25%
2	ETS Midterm Test Kognitif - UTS   Cognitive - Midterm Exam	17.5%	8.75%	0%	26.25%
3	Tugas 2 (Visual & kognitif Ergo) Assignmnt 2 (Visual & Cognitive Ergo) Hasil proyek   Team-based Project	0%	8.75%	15%	23.75%
4	EAS Final Exam Hasil proyek   Team-based Project	0%	8.75%	15%	23.75%
	TOTAL Target	<b>35%</b>	<b>35%</b>	<b>30%</b> 30%	100% 100%

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Eri Naharani Ustazah





## Design Appreciation DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



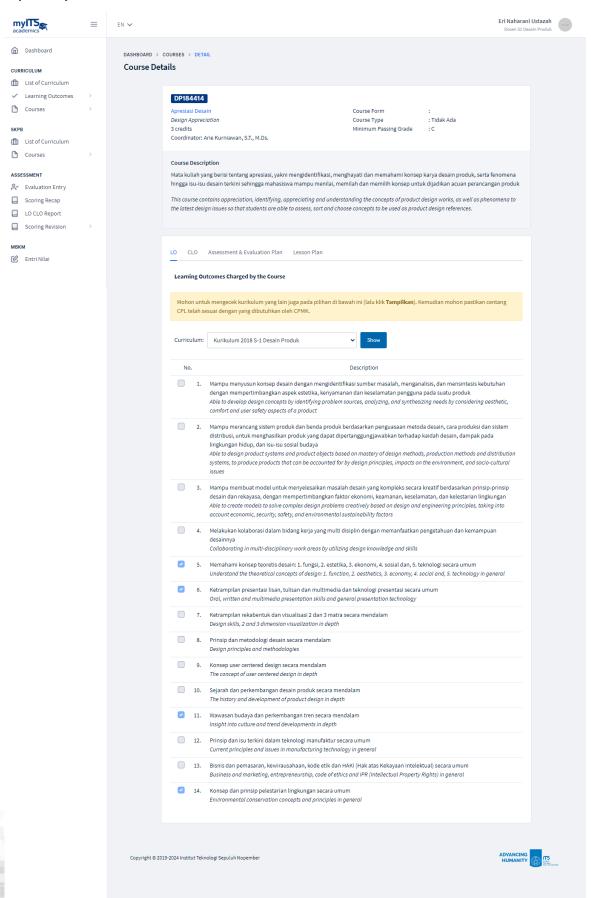
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

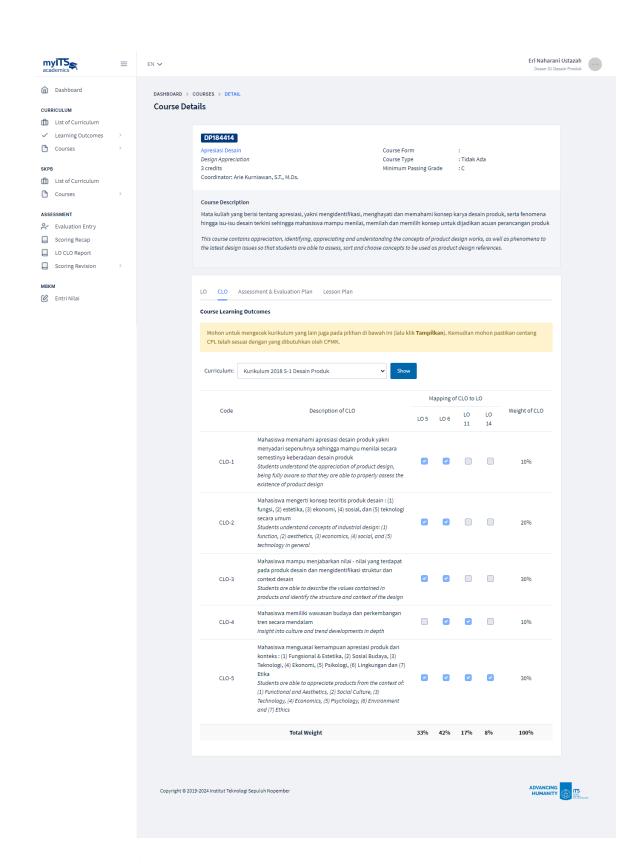
Course unit title	Design Appreciation
Course unit code	DP184414
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	2 <sup>nd</sup> year
Semester/trimester when the course unit is delivered	4 <sup>th</sup> semester
Number of ECTS credits allocated	4,8 ECTS Credits
Name of lecturer	Arie Kurniawan, S.T., M.Ds.
Learning outcomes of the course unit	Students can comprehensively explain the criteria for: 1. Postmodern Design. 2. Popular Culture. 3. Semiotics. 4. Design in Context. 5. Emerging Technologies. 6. Sustainability in Design.
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	This course covers appreciation, which involves identifying, appreciating, and understanding the concepts of product design, as well as phenomena to current design issues. This enables students to assess, sort, and choose concepts as references for product design.  1) Applied Aesthetics. 2) Good Design. 3) Iconic Design.
	<ul> <li>4) Postmodern Design.</li> <li>5) Popular Culture.</li> <li>6) Emotional Design.</li> <li>7) Visual Culture.</li> <li>8) Design Object &amp; Society.</li> <li>9) Do-It-Yourself (DIY) Culture.</li> <li>10) Emerging Technologies.</li> <li>11) Biomimicry.</li> <li>12) Mechatronics.</li> </ul>

	<ul><li>13) Smart Objects.</li><li>14) Semiotics.</li><li>15) Sustainable Design.</li><li>16) Water Stewardship.</li><li>17) Nature-Inspired Design.</li></ul>
	18) Product True Cost.
Recommended or required reading and other learning resources/tools	<ul> <li>Clay, Robert, Beautiful thing an introduction to design, Ney York, Berg, 2009</li> <li>Couturier, Elisabeth, Talk About Design, Paris, Flammarion, 2009</li> <li>Norman, Donald A., Emotional Design, Basic Books, 2004</li> <li>Papanek, Victor, The Green Imperative: Ecology and Ethics in Design and Architecture, Chicago: Thames and Hudson. 1995</li> <li>Vihma, Susan (ed), Semantic and Aesthetic Functions in Design. Report of workshop and three papers of the</li> </ul>
Planned learning activities and	2nd Nordcode Seminar, Finland:UIAH Helsinki, 2003 Case Study; Team Based Learning
teaching methods	
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

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DP184414

Apresiasi Desain
Design Appreciation
Course Type
: Tidak Ada
3 credits
Coordinator: Arie Kurniawan, S.T., M.Ds.

Course Description

Mata kuliah yang berisi tentang apresiasi, yakni mengidentifikasi, menghayati dan memahami konsep karya desain produk, serta fenomena hingga isu-isu desain terkini sehingga mahasiswa mampu menilai, memilah dan memilih konsep untuk dijadikan acuan perancangan produk

the latest design issues so that students are able to assess, sort and choose concepts to be used as product design references.

LO CLO Assessment & Evaluation Plan Lesson Plan Assessment & Evaluation Plan Total Weight 1 Dasar Apresiasi Basic Appreciation Studi Kasus | Case Method 5% 0% 096 10% 2 Nilai-nilai Desain Produk Product Design Value Kognitif - UTS | Cognitive -Midterm Exam 3 Presentasi Membedah dan Apresiasi Produk Product Presentatio& Design 10% 1096 20% Appreciation
Kognitif - Tugas | Cognitive -Publication of Design Appreciation 10% 10% 20% 50% Hasil proyek | Team-based Project 20% TOTAL 10% 10% 30% 100%

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☐ List of Curriculum

✓ Learning Outcomes

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Scoring Recap

LO CLO Report

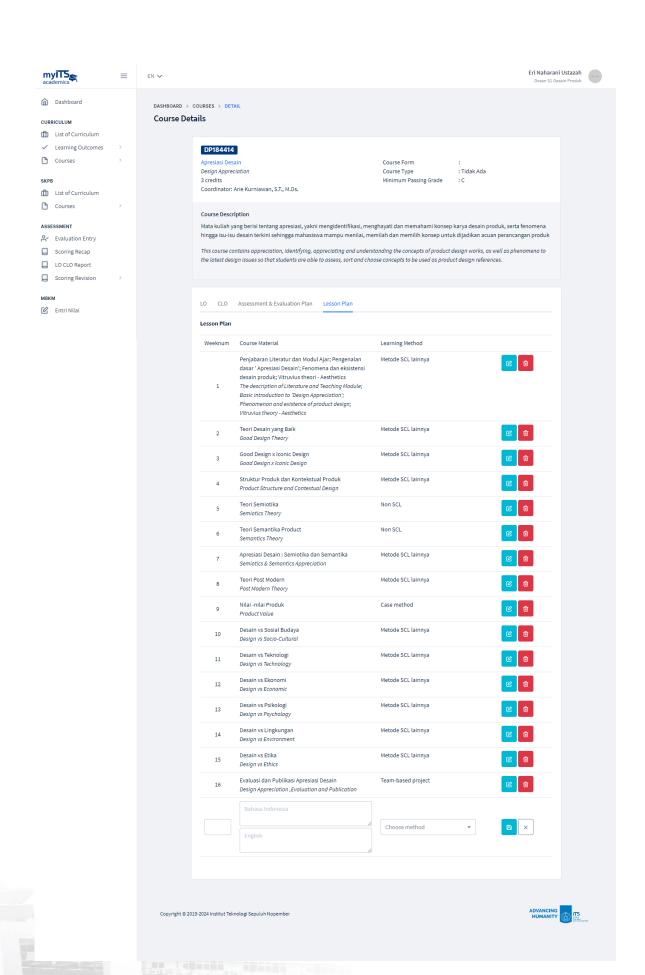
Courses

ASSESSMENT

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### Material & Process DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023

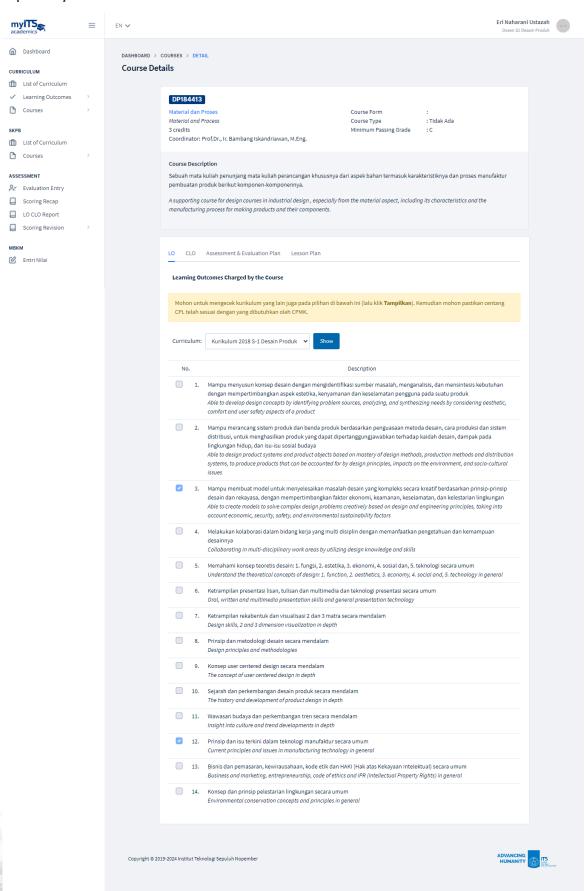
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

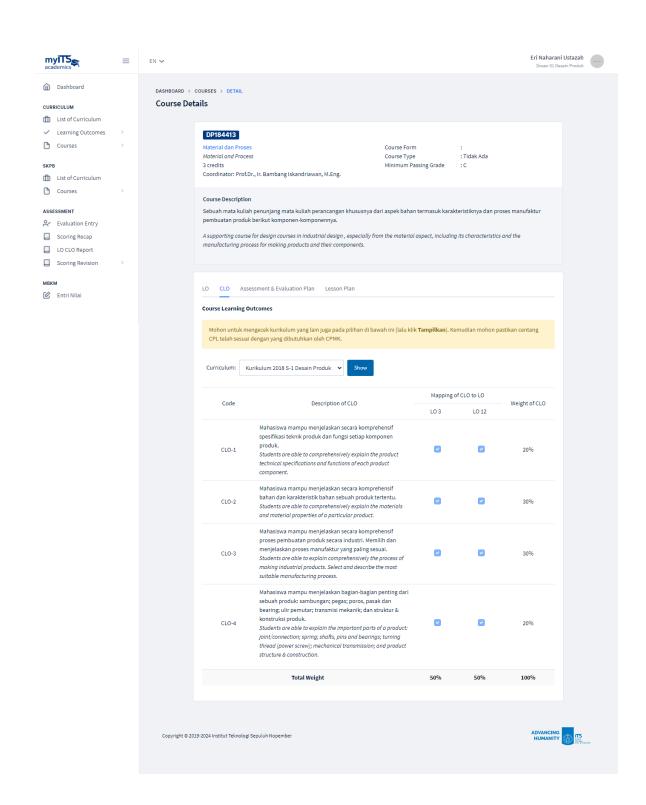
Course unit title	Material and Process
Course unit code	DP184413
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	2 <sup>nd</sup> year
Semester/trimester when the course unit is delivered	4 <sup>th</sup> semester
Number of ECTS credits allocated	6,4 ECTS Credits
Name of lecturer	Prof.Dr., Ir. Bambang Iskandriawan, M.Eng.
Learning outcomes of the course unit	Students can comprehensively explain the criteria for:  1. Material properties and material selection in product design.  2. Manufacturing processes.  3. Joints.  4. Springs.  5. Shafts, pins, and bearings.  6. Power screws.  7. Mechanical transmission.  8. Structure and construction.  9. Systems/sub-systems in products, sustainable design.
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	This course serves as a supporting subject for design courses, especially focusing on material and process aspects.  1) Material properties: density, Young's modulus, strength, and cost. 2) Material properties: elongation, toughness, resistivity, energy content, maximum service temperature, and recycling. 3) Material selection for product design. 4) Molding process in the production of product components. 5) Casting process in the production of product components.

Recommended or required reading and other learning resources/tools	6) Bulk forming process in the production of product components. 7) Sheet forming process in the production of product components. 8) Rapid prototyping process, lay-up method, and powder methods in the production of product components. 9) Use and selection of joints in product design. 10) Use and selection of springs in product design. 11) Use and selection of shafts, pins, and bearings in product design. 12) Use and selection of power screws in product design. 13) Use and selection of mechanical transmission (belt, chain, and gear) in product design. 14) Use and selection of structure and construction in product design. 15) Concept and implementation of Sustainable Design • Asbhy, Mike and Kara Johnson. 2010. Materials and Design-The Art and Science of Material Selection in Product Design. Burlington: Butterworth-Heinemann • Cross, Nigel.2000. Enginering Design Methods: Strategies for Product Design, 3rd edition, New York: John Wiley & Sons. Ltd • Mott, R.L., 2009, "Elemen-elemen Mesin dalam Perancangan Elemen Mesin Terpadu", Penerbit Andi, Buku 1 dan 2 • Karl T. Ulrich and Steven D. Eppinger, 2015, Product Design And Development (6th Edition) • Daniel F. Cuffaro, 2014, The Industrial Design Reference + Specification Book
Planned learning activities and teaching methods	Case Method; Team Based Learning
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

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CURRICULUM

List of Curriculum

✓ Learning Outcomes Courses

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ASSESSMENT

A Evaluation Entry Scoring Recap

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DASHBOARD > COURSES > DETAIL

### Course Details

DP184413

Material and Process

Course Type Minimum Passing Grade

Course Form

: Tidak Ada

Coordinator: Prof.Dr., Ir. Bambang Iskandriawan, M.Eng.

Course Description

Sebuah mata kuliah penunjang mata kuliah perancangan khususnya dari aspek bahan termasuk karakteristiknya dan proses manufaktur pembuatan produk berikut komponen-komponennya.

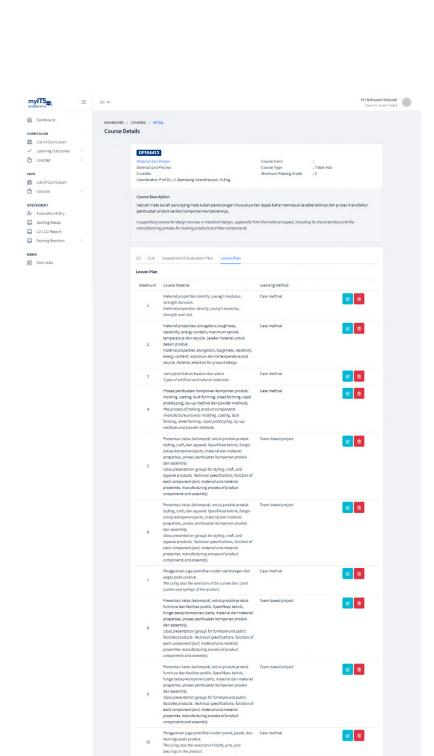
manufacturing process for making products and their components.

LO CLO Assessment & Evaluation Plan Lesson Plan

Assessment & Evaluation Plan Total Weight 1 Produk styling, craft, dan apparel. Styling, craft and apparel products. 496 Hasil provek | Team-based Project 2 Produk furniture dan fasilitas Furniture products and public 696 696 496 20% Hasil proyek | Team-based Project 3 Produk transportasi dan Transportation products and 496 696 496 20% appliances.
Hasil proyek | Team-based Project 4 Model animasi transmisi mekanik/automata Mech./automata transmission Hasil proyek | Team-based Project 5 Pemahaman artikel jurnal desain produk. Understanding of product design journal Kognitif - Quiz | Cognitive - Quiz 6 Majalah material dan proses 2021. Material and process magazine 2021. 10% Hasil proyek | Team-based Project TOTAL

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Target



components and assembly.

Presentasi visa (Palemopoli virtuk produk produk transportasi dan peraham, Speatifikasi vietnyk, Kingsi sepatam, Speatifikasi vietnyk, Kingsi sepatam, Speatifikasi vietnyk, Kingsi sepatam, Speatifikasi vietnyk, Speat

Penggunaan juga pemilihan sistim transmisi Case method mekanik, power screw, dan struktur & kontruksi pada

Presentasi kelas (kelompok) sistim mekanik gerak. Team-based project dia automatik.
Class presentation (proug) of miston mechanics and economic present.

English Choose method v

13 Produk.
The using also the selection of mechanical transmission systems, power screws, and the structure & construction of the product.



**8** 

**8 9** 

**8** 

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### 5th SEMESTER

Bachelor of Industrial Design (BOID)





## Product Design 2 DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023

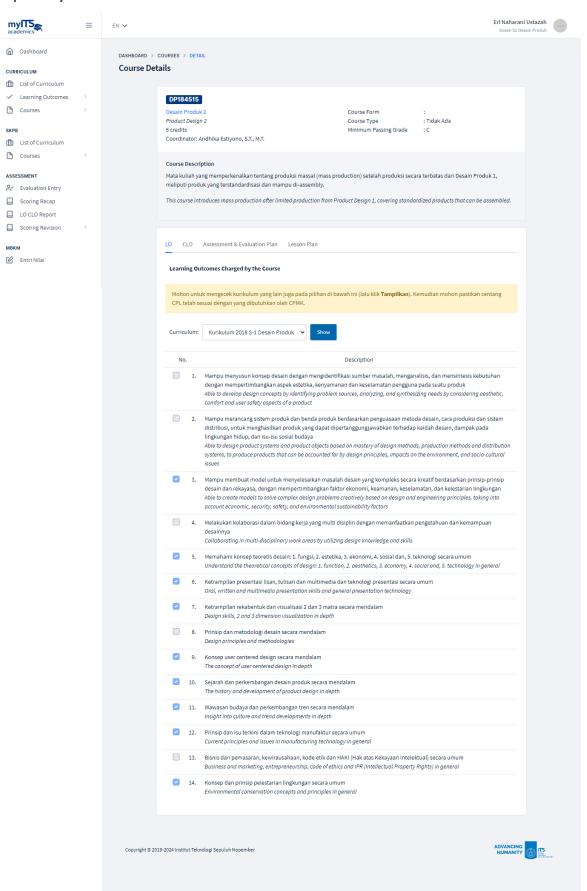
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

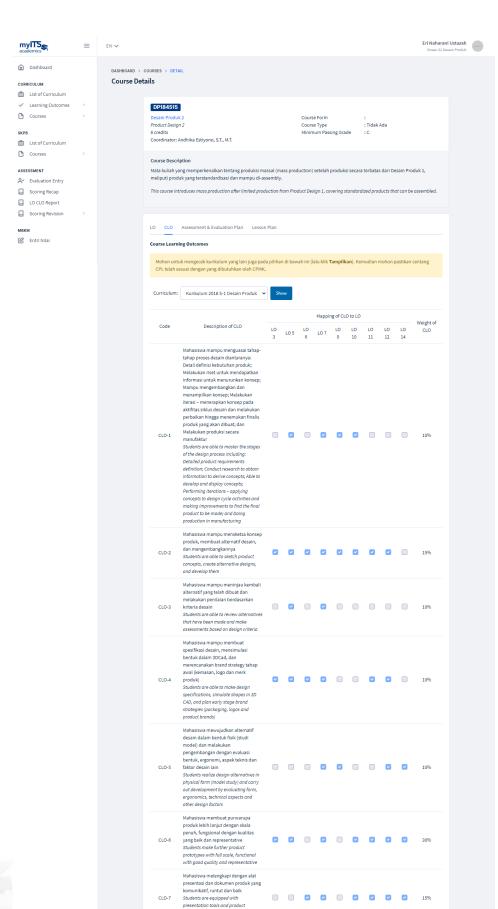
Course unit title	Product Design 2
Course unit code	DP184515
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	3 <sup>rd</sup> year
Semester/trimester when the course unit is delivered	5 <sup>th</sup> semester
Number of ECTS credits allocated	9,6 ECTS Credits
Name of lecturer	Andhika Estiyono, S.T., M.T.
Learning outcomes of the course unit	<ol> <li>Students can master the stages of the design process, including:         <ul> <li>Detailed definition of product needs</li> <li>Conducting research to gather information to derive concepts</li> <li>Developing and presenting concepts</li> <li>Iterating - applying concepts in the design cycle and making improvements until finding the final product finalist</li> <li>Manufacturing production</li> </ul> </li> <li>Students can sketch product concepts, create design alternatives, and develop them.</li> <li>Students can review previously made alternatives and assess them based on design criteria.</li> <li>Students can create design specifications, simulate forms in 3DCad, and plan the initial stage of brand strategy (packaging, logo, and product brand).</li> <li>Students materialize design alternatives in physical form (study model) and develop them with evaluations of form, ergonomics, technical aspects, and other design factors.</li> <li>Students create further prototypes with full scale, functionality, good quality, and representativeness.</li> <li>Students complete communicative, coherent, and well-organized presentation tools and product documents</li> </ol>
Mode of delivery	face-to-face
Prerequisites and co-requisites	

Recommended or required reading and other learning resources/tools	This course introduces mass production after limited production from Product Design 1, covering standardized products that are capable of assembly.  1) Insight into the design process of various products with their problem cases. 2) In-depth examination, investigation, and information search for product needs with problem framing, creative proposal, and solutions that have been attempted. 3) Study and review of existing products. 4) Design thinking approach to defining, experimenting, solving, and applying design needs. 5) Decomposition of design factors of case products to achieve aesthetic and functional product appeal. 6) Ideation with alternative sketches. 7) Technical aspects of fabrication, manufacturing through 3D cad simulation to determine the relationships and integration between components. 8) Evaluation of design alternatives with predetermined criteria from quantitative/scoring and qualitative methods (early). 9) Material review of presentation techniques.  • Baumann, K., & Thomas, B. (2002). User interface design of electronic appliances. CRC Press. • Boothroyd, G., Dewhurst, P., & Knight, W. A. (1994). Product Design for Manufacture and Assembly, revised and expanded. CRC press. • Cross, N., & Roy, R. (1989). Engineering design methods (Vol. 4). New York: Wiley. • Parsons, T. (2009). Thinking: Objects: Contemporary approaches to product design (Vol. 18). AVA publishing. • Treitz, M. (2006). Production process design using
Planned learning activities and	multi-criteria analysis.  Discovery Learning; Project Based Learning; Case
teaching methods	Method
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

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documents that are communicative, coherent and good

Total Weight 8% 14% 8% 19% 8% 11% 14% 8% 100%



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CURRICULUM

List of Curriculum ✓ Learning Outcomes >

Courses

List of Curriculum

Courses

ASSESSMENT

A Evaluation Entry Scoring Recap

LO CLO Report

Entri Nilai

DASHBOARD > COURSES > DETAIL

Course Details

DP184515

Product Design 2 Coordinator: Andhika Estiyono, S.T., M.T. Course Form Course Type Minimum Passing Grade

: Tidak Ada

Course Description

Mata kuliah yang memperkenalkan tentang produksi massal (mass production) setelah produksi secara terbatas dari Desain Produk 1,

 $This course introduces \ mass \ production \ after \ limited \ production \ from \ Product \ Design \ 1, covering \ standardized \ products \ that \ can \ be \ assembled.$ 

LO CLO Assessment & Evaluation Plan Lesson Plan

No.	Evaluation Plan	CLO-1	CLO-2	CLO-3	CLO-4	CLO-5	CLO-6	CLO-7	Total Weight
1	Project 1: Portofolio Project 1: Portfolio Studi Kasus   Case Method	0%	5%	0%	0%	0%	0%	5%	10%
2	Project 1: Gambar teknik Project 1: Technical drawing Studi Kasus   Case Method	0%	096	0%	5%	0%	5%	0%	10%
3	Project 1: Animasi Project 1: Animation Studi Kasus   Case Method	0%	0%	0%	0%	5%	5%	0%	10%
4	Project 1: Publikasi media sosial Project 1: Social media publication Kognitif - Tugas   Cognitive - Assignment	5%	096	5%	0%	0%	0%	0%	10%
5	Project 2: Portfolio Project 2: Portfolio Studi Kasus   Case Method	0%	5%	0%	0%	0%	0%	10%	15%
6	Project 2: Gambar teknik Project 2: Technical drawing Studi Kasus   Case Method	0%	0%	0%	5%	0%	10%	0%	15%
7	Project 2: Animasi Project 2: Animation Studi Kasus   Case Method	0%	096	0%	0%	5%	10%	0%	15%
8	Project 2: Publikasi media sosial Project 2: Social media publication Kognitif - Tugas   Cognitive - Assignment	5%	5%	5%	0%	096	0%	0%	15%
	TOTAL Taraet	10% 10%	15% 15%	10% 10%	10% 10%	10% 10%	<b>30%</b> <i>30</i> %	15% 15%	100% 100%

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LO CLO Report Scoring Revision DASHBOARD > COURSES > DETAIL Course Details

DP184515		
Desain Produk 2	Course Form	:
Product Design 2	Course Type	: Tidak Ada
6 credits	Minimum Passing Grade	:C
Coordinator: Andhika Estiyono, S.T., M.T.		
Course Description		
Mata kuliah yang memperkenalkan tentang meliputi produk yang terstandardisasi dan n	oroduksi massal (mass production) setelah produksi sed nampu di-assembly.	ara terbatas dari Desain Produk 1,
This source introduces more are dustion after	limited production from Product Design 1, covering stand	landing days ducto that can be accombled

LO CLO Assessment & Evaluation Plan Lesson Plan Lesson Plan Weeknum Course Material Learning Method Perkenalan Mata Kuliah Desain Produk 2. Penjelasan Non SCI **E** retkenaan Mata Aulian Desain Produk 2: Penjelasan tugas pertama Desain Produk 2: Desain handtools Product Design 2 Course Introduction. Explanation of the first task Production Design 2: Hand tools design Studi aktivitas dan Faktor Manusia pada Handtools Case method Study of activities and human factors on hand tools Modeling manual pada desain handtools, dan Menentukan desain terpilih Metode SCL lainnya 3 Manual modeling on design handtools, and Design selection Usability testing. Detail Design dan model/purwarupa handtools Usability testing. Detailed designs and Metode SCL lainnya **E** models/prototypes of hand tools Portofolio dan gambar teknik (review). Melanjutkan Membuat Detail Design dan model/purwarupa Metode SCL lainnya **6** handtools Portfolio and technical drawinas (review), Continuina to make detailed designs and handtools models/prototypes Project kedua Desain Produk 2 : Desain enclosure Metode SCL lainnya **E** speaker. Membuat moodboard . Second Project Product Design 2: Speaker enclosure design. Making moodboard Studi eksisting & studi volume. Reverse Engineering Metode SCL lainnya Existing studies & volume studies. Reverse Engineering UI pada desain enclosure. Preliminary idea : Metode SCL lainnya **6** membuat 25 thumbnail sketches UI on enclosure design. Preliminary idea : make 25 thumbnail sketches Pengantar tentang desain speaker. Pemilihan Metode SCL lainnya **E** alternatif desain: 10 desain terpilih An introduction to speaker design. Selection of design alternatives: 10 selected designs Studi konfigurasi. Studi alternatif konfigurasi Metode SCL lainnya 10 Configuration study. Study alternative configuration Paper prototyping dan usability testing, Melanjutkan Metode SCL lainnya **6** membuat paper prototype dan usability testing
Paper prototyping and usability testing. Continuing to
make paper prototypes and usability testing 11 Pengantar CAM. Pemilihan alternatif desain Metode SCL lainnya **E** 12 CAM Introduction. Selection of design alternatives Gambar presentasi & gambar operasional (review). Melanjutkan membuat purwarupa Metode SCL lainnya **E** Presentation drawings & operational drawings (review). Continuing prototyping Cek progres. Melanjutkan membuat purwarupa Metode SCL lainnya 14 Check progress. Continuing prototyping Gambar Teknik. Melanjutkan membuat gambar Metode SCL lainnya 15 Technical drawings. Continuing to make technical Portofolio & presentasi 3 menit. Pengumpulan tugas Metode SCL lainnya besar kedua Portfolio & presentation 3 minutes. Second final 16 project a ×



### Design Systems DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



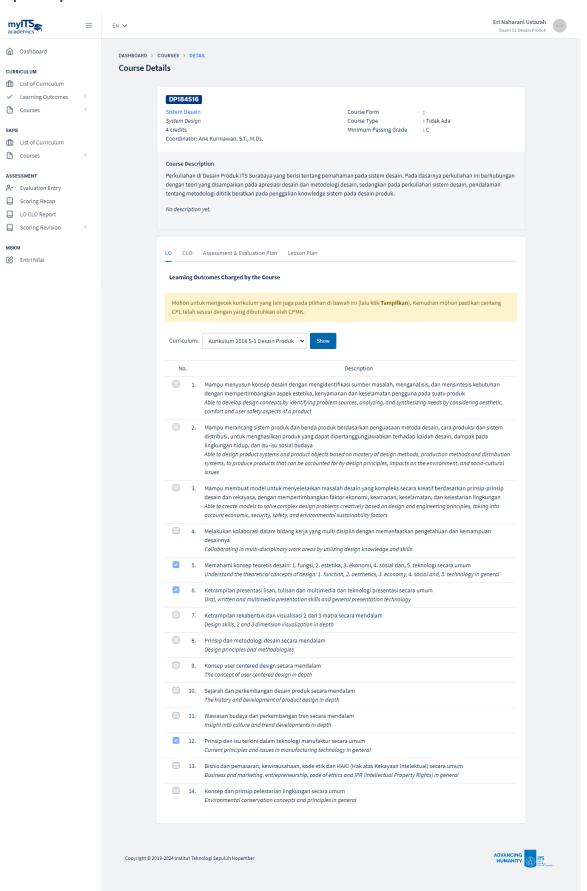
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

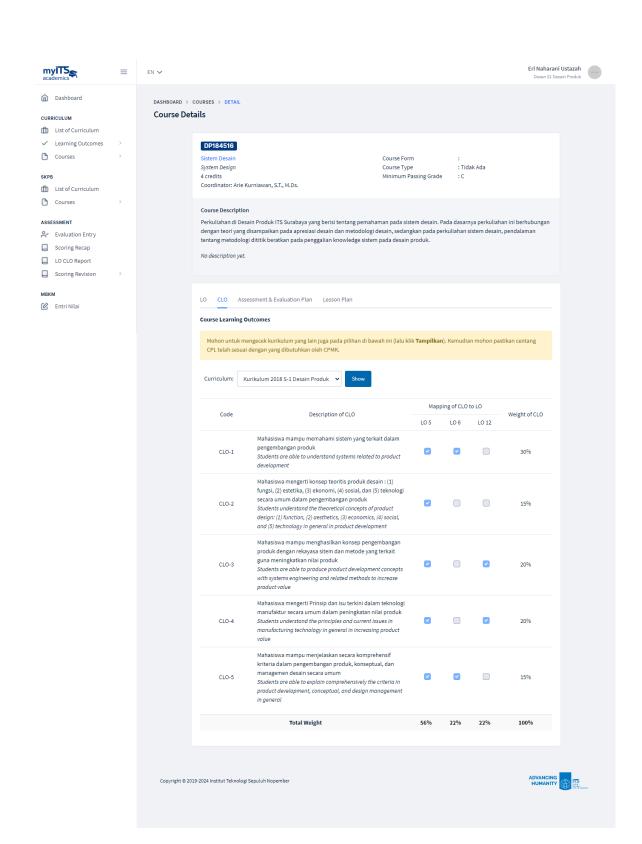
Course unit title	Design System
Course unit code	DP184516
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	3 <sup>rd</sup> year
Semester/trimester when the course unit is delivered	5 <sup>th</sup> semester
Number of ECTS credits allocated	6,4 ECTS Credits
Name of lecturer	Arie Kurniawan, S.T., M.Ds.
Learning outcomes of the course unit	Students will be able to comprehensively explain criteria for:  1. Conceptual products.  2. Design Thinking.  3. Design Factors.  4. Visual Context.  5. Product Management.  6. Design Context.
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	Creative learning in understanding the economic value of products and adapting product development strategies according to market segmentation needs and sustainable products.
	<ol> <li>Modularity System and Product Development.</li> <li>Fractals System and Ornamental Variety Development.</li> <li>Exploration of product system and operation: Movable, foldable, knockdown, stacking, knockdown, and transformable systems.</li> <li>Exploration of the application of product semantic aspects.</li> <li>Interchangeability of Parts &amp; Components.</li> <li>Strategies and Alternative Product Development.</li> <li>Strategies for the Development of Product Variants and Product Line up</li> </ol>

Recommended or required reading and other learning resources/tools	Asbhy, Mike and Kara Johnson. 2010. Materials and Design-The Art and Science of Material Selection in Product Design. Burlington: ButterworthHeinemann
	Brown, Tim. 2010. Change by Design, HarperCollins
	Lawson, Bryan.2012. How Designers Think, London: The Architectural Press Ltd
	<ul> <li>Martin, Bella and Bruce Hanington. 2010. Universal Methods of Design100 Ways to Research Complex Problems, Develop Innovative Ideas, and Design Effective Solutions. Massachusetts: Rockport Publishers</li> </ul>
	Nelson, Harold.2012.The Design Way: Intentional Change in Unpredictable World. London: MIT Press
Planned learning activities and	Discovery Learning; Case Method; Team Based
teaching methods	Learning
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

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Scoring Revision

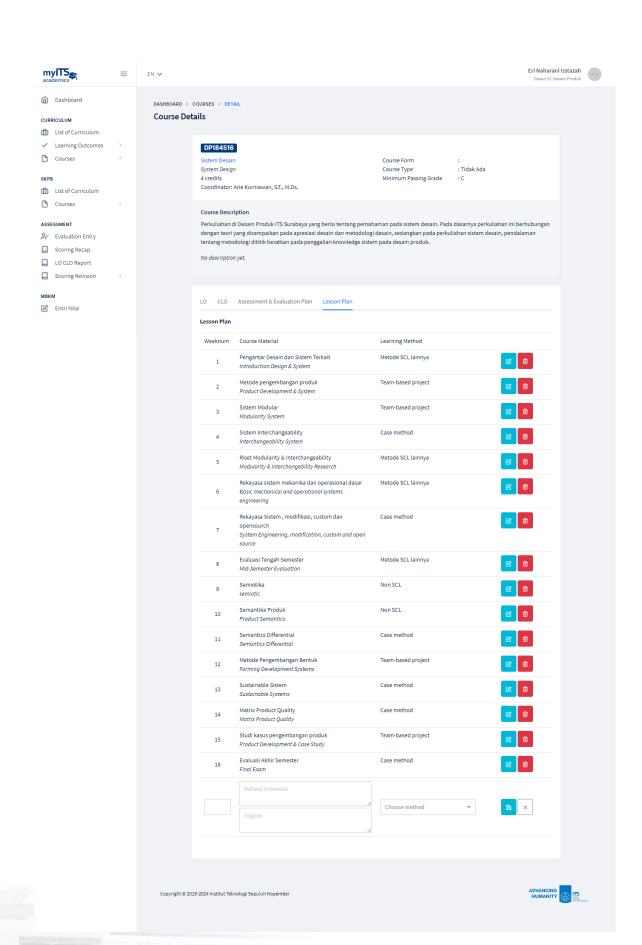
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CLO	Assessment & Evaluation Plan	Lesson P	lan					
sment &	& Evaluation Plan							
Evalu	ation Plan	CLO-1	CLO-2	CLO-3	CLO-4	CLO-5	Total Weight	
eksis Unde Desig	ting orstanding of the existing on Sys	10%	5%	2%	5%	2%	24%	
pada Produ meth	produk uct design development ods	10%	3%	8%	5%	2%	28%	
desai syste	in m design evaluation	5%	3%	0%	5%	2%	15%	
desig docu	n system presentation and menta	596	496	10%	5%	9%	33%	
	TOTAL Target	<b>30%</b> 30%	<b>15%</b> 15%	<b>20%</b> 20%	<b>20%</b> 20%	<b>15%</b> <i>15</i> %	<b>100%</b> 100%	
	Evalu Permi eksis Undet Desig Studi Meto pada Prodi meth Hasill evalu desa syste Studi prese desig docu	Evaluation Plan  Pemahaman Sistem Desain pada eksisting Understanding of the existing Design Sys Studi Kasus   Case Method  Metode pengembangan desain pada produk Product design development methods Hasil proyek   Team-based Project  evaluasi sistem pada produk desain system design evaluation Studi Kasus   Case Method  presentasi dan dokumentasi design system presentation and documenta Hasil proyek   Team-based Project	Evaluation Plan  Evaluation Plan  CLO-1  Pemahaman Sistem Desain pada eksisting Understanding of the existing Design Sys Studi Kasus   Case Method  Metode pengembangan desain pada produk Product design development methods Hasil proyek   Team-based Project  evaluasi Sistem pada produk desain system design evaluation Studi Kasus   Case Method  Total  S%6  TOTAL  30%6	Evaluation Plan CLO-1 CLO-2  Pemahaman Sistem Desain pada eksisting Understanding of the existing 10% 5% Studi Kasus   Case Method  Metode pengembangan desain pada produk Product design development 10% 3% methods  Hasil proyek   Team-based Project evaluasi sistem pada produk desain system design evaluation Studi Kasus   Case Method   5% 3% 3% Studi Kasus   Case Method   5% 4% 4% Hasil proyek   Team-based Project   5% 4% 4% 15% 15% 15% 15% 15%	Evaluation Plan CLO-1 CLO-2 CLO-3  Pemahaman Sistem Desain pada eksisting Understanding of the existing Design Sys Studi Kasus   Case Method  Metode pengembangan desain pada produk Product design development 10% 3% 8% 8% methods  Hasil proyek   Team-based Project  evaluasi sistem pada produk desain system design evaluation Studi Kasus   Case Method   5% 3% 0% 0% Studi Kasus   Case Method   5% 4% 10% 10% 10% 10% 10% 10% 10% 10% 10% 10	Evaluation Plan CLO-1 CLO-2 CLO-3 CLO-4  Pemahaman Sistem Desain pada eksisting Understanding of the existing 10% 5% 2% 5% 5% 5% 5% 5% 5% 5% 5% 5% 5% 5% 5% 5%	Evaluation Plan	Evaluation Plan

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Eri Naharani Ustazah





# Computer Aided Manufacture DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023

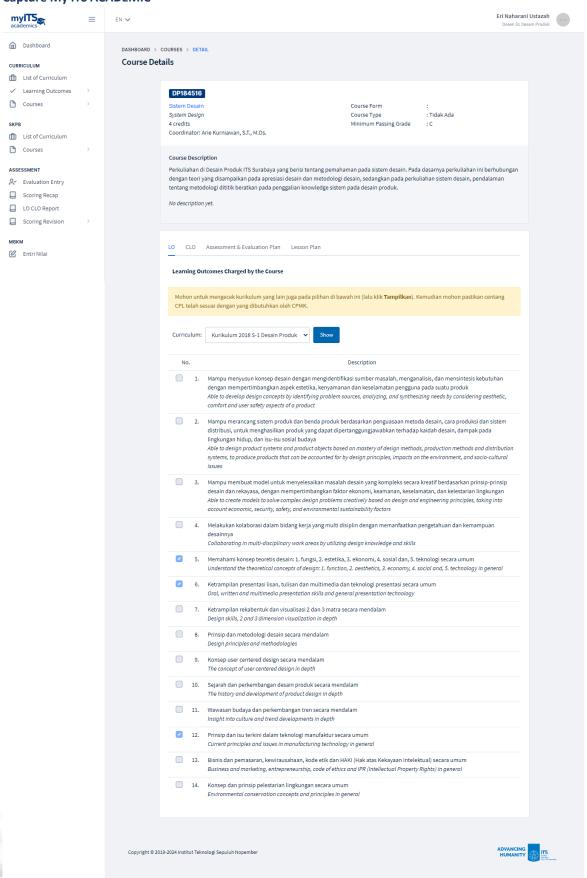
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

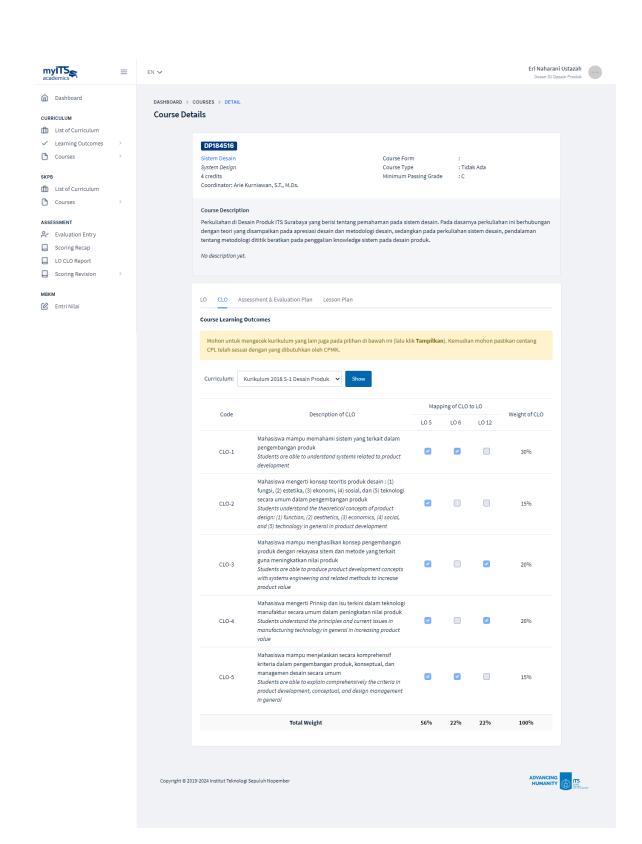
Course unit title	Computer Aided Manufacture
Course unit code	DP184517
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	3 <sup>rd</sup> year
Semester/trimester when the course unit is delivered	5 <sup>th</sup> semester
Number of ECTS credits allocated	6,4 ECTS Credits
Name of lecturer	Arie Kurniawan, S.T., M.Ds.
Learning outcomes of the course unit  Mode of delivery	Students will be able to design maximally within the limitations of tools and machines.  1. Students will be able to operate machines correctly and safely.  2. Students will be able to operate CAM software and generate G-Code as machine input.  3. Students will know the workflow steps in a manufacturing process according to the case and product creation.  4. Students will be able to use applications that support evaluation and correction goals.  5. Students will be able to assemble components that have been created.  face-to-face
Prerequisites and co-requisites	-
Course content	Planning and Rapid and Accurate Prototyping. There is clarity of information for review in subsequent production stages in a workflow. Utilizing subtractive methods (CNC) or additive methods (3D printing) according to the product case and already meeting the prerequisites and limitations of the automated machine operation.
	<ul> <li>Bryden, D. (2014). CAD and rapid prototyping for product design. Laurence King Publ</li> <li>Chang, K. H. (2014). Product design modeling using CAD/CAE: the computer aided engineering design series. Academic Press.</li> </ul>

	• Brunet, P., Hoffmann, C., & Roller, D. (Eds.). (2013). Cad Tools and algorithms for product design. Springer Science & Business Media.				
Recommended or required reading and other learning resources/tools	-				
Planned learning activities and teaching methods	Discovery Learning; Case Study; Team Based Learning (Metode Pembelajaran)				
Language of instruction	Indonesia				
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation				

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LO CLO Report

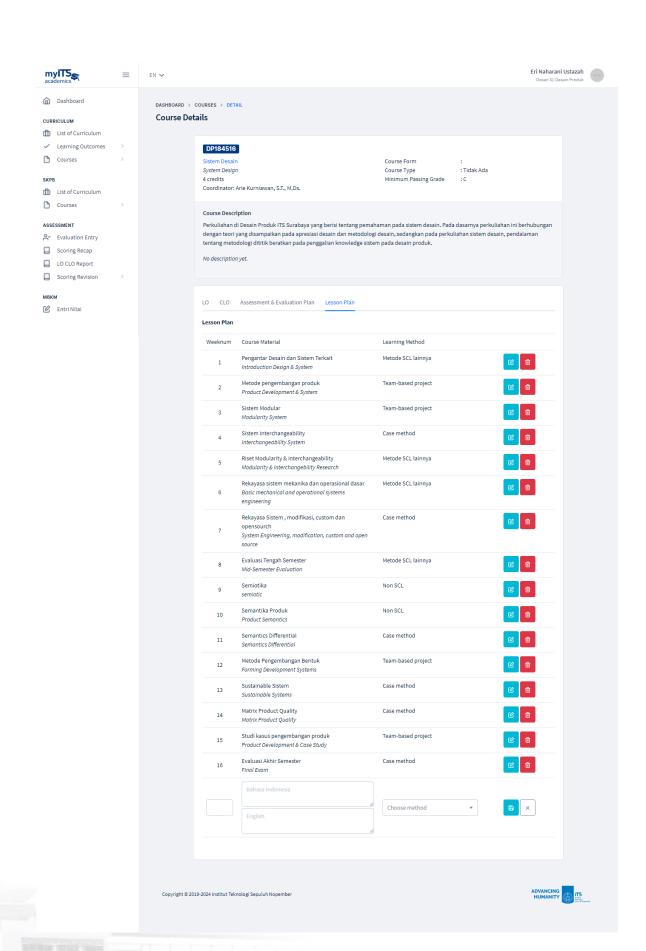
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LO	CLO	Assessment & Evaluation Plan	Lesson P	lan							
Assessment & Evaluation Plan											
No.	Evalu	ation Plan	CLO-1	CLO-2	CLO-3	CLO-4	CLO-5	Total Weight			
1	eksis Unde Desig	ahaman Sistem Desain pada ting vistanding of the existing yn Sys i Kasus   Case Method	10%	5%	2%	5%	2%	24%			
2	pada Prodi meth	de pengembangan desain produk uct design development ods proyek   Team-based Project	10%	3%	8%	5%	2%	28%			
3	desai syste	iasi sistem pada produk in <i>m design evaluation</i> i Kasus   <i>Case Method</i>	5%	3%	0%	5%	2%	15%			
4	desig docu	entasi dan dokumentasi In system presentation and menta proyek   Team-based Project	5%	4%	1096	5%	9%	33%			
		<b>TOTAL</b> Target	<b>30%</b> 30%	<b>15%</b> 1596	<b>20%</b> 20%	<b>20%</b> 20%	<b>15%</b> 15%	<b>100%</b> 100%			

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Eri Naharani Ustazah

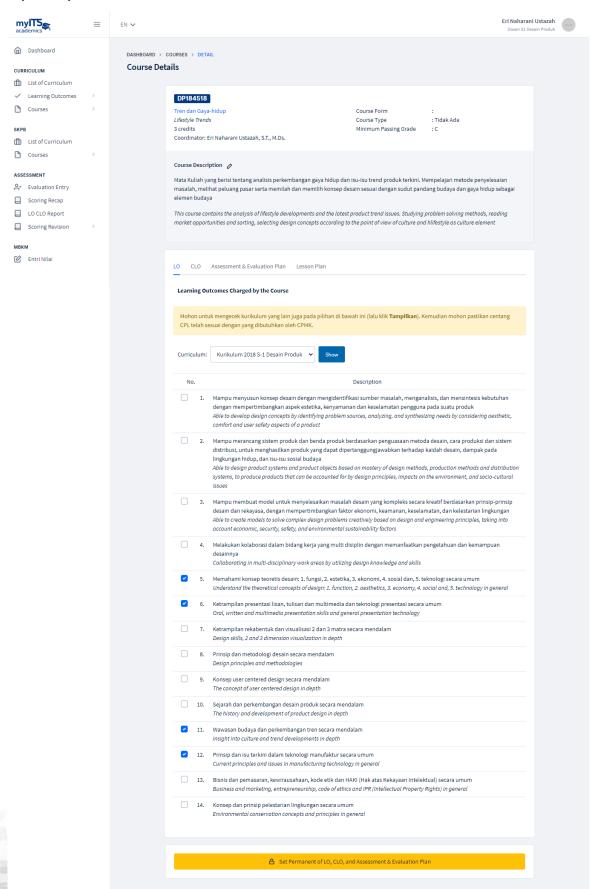


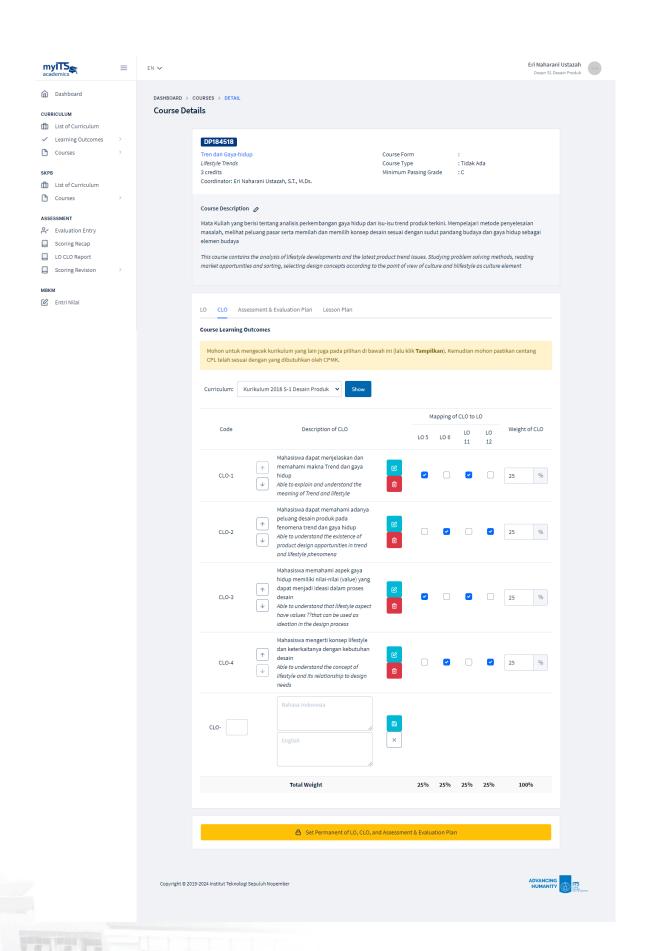


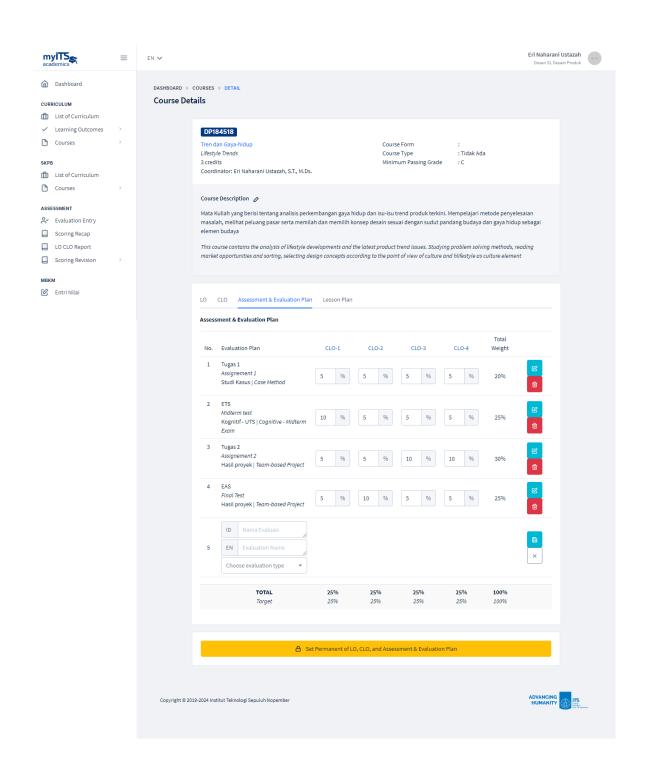
# Trend & Lifestyle DESCRIPTION OF COURSE UNIT

Course unit title	Trend and Lifestyle
Course unit code	DP184518
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	3 <sup>rd</sup> year (tahun)
Semester/trimester when the course unit is delivered	5 <sup>th</sup> semester
Number of ECTS credits allocated	4,8 ECTS Credits
Name of lecturer	Eri Naharani Ustazah, S.T., M.Ds.
Learning outcomes of the course unit	Students will be able to comprehensively explain criteria for:  1. Design Thinking.  2. Client Interaction.  3. Product Management.  4. Design Context
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	Course on Lifestyle Analysis and Contemporary Product Trend Issues. The course covers problem- solving methods, market opportunity identification, and the selection of design concepts based on cultural perspectives and human lifestyles.
	<ol> <li>Introduction and insight into trends and lifestyles.</li> <li>Fundamental differences between trends and lifestyles.</li> <li>Design insights, designers, and design works that become trends.</li> <li>Insights into trend forms in industrial design products (stepform: 1925-1935, streamform: 1935-1955, aeroform: 1945-1965, sheerform: 1953-1970, sculptureform: 1960-1975, crispform: 1975-1990, ergoform: 1985-2005, geomodform 2005-2015).</li> <li>Relationship between Trend and Lifestyle.</li> <li>Product value: lifestyle values in design works.</li> <li>Trend forecasting.</li> <li>Persona theory.</li> </ol>

	0) 14
	<ul> <li>9) Muse Theory.</li> <li>10) MOODBOARD (Trend-board, form-board, color-board, materialboard, pattern-board) as a stage in the inspiration and ideation process of product design.</li> <li>11) Implementation of MOODBOARD in the language of form/product.</li> <li>12) Product utility image (products emphasizing image value, lifestyle, and products emphasizing functional value), Lifestyle aspects inproduct design: Visceral aspect, Behavioral aspect, and Reflective aspect.</li> <li>13) Emotional Design.</li> <li>14) User experience in product design.</li> <li>15) Product Context in lifestyle</li> </ul>
Recommended or required reading and other learning resources/tools	<ul> <li>Brown, Tim. 2010. Change by Design, HarperCollins</li> <li>Burke, Sandra. 2012. Fashion Designer-Concept to Collection. Burke publishing: London</li> <li>Chaney, David. Lifestyle-Sebuah Pengantar Komprehensif. Yogyakarta, Jalasutra, 2011</li> <li>Lawson, Bryan. 2012. How Designers Think, London: The Architectural Press Ltd</li> <li>Nelson, Harold. 2012. The Design Way: Intentional Change in Unpredictable World. London: MIT Press</li> </ul>
Planned learning activities and teaching methods	Case Study; Team Based Learning
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation







#### CURRICULUM

List of Curriculum ✓ Learning Outcomes >

Courses

#### SKPB

List of Curriculum

Courses

#### ASSESSMENT

Ar Evaluation Entry

Scoring Recap

LO CLO Report Scoring Revision

Entri Nilai

DASHBOARD > COURSES > DETAIL

### Course Details

DP184518	A	
Tren dan Gaya-hidup	Course Form	:
Lifestyle Trends	Course Type	: Tidak Ada
3 credits	Minimum Passing Grade	: C
Coordinator: Eri Naharani Ustazah, S.T., M.Ds.		

Mata Kuliah yang berisi tentang analisis perkembangan gaya hidup dan isu-isu trend produk terkini. Mempelajari metode penyelesaian masalah, melihat peluang pasar serta memilah dan memilih konsep desain sesuai dengan sudut pandang budaya dan gaya hidup sebagai elemen budaya

This course contains the analysis of lifestyle developments and the latest product trend issues. Studying problem solving methods, reading market opportunities and sorting, selecting design concepts according to the point of view of culture and hilfestyle as culture element

LO CLO	Assessment & Evaluation Plan Lesson Plan		
Lesson Pla	1		
Weeknum	Course Material	Learning Method	
1	Pengantar trend dan gaya hidup Introduction tp trend and lifestyle	Non SCL @ @	
2	Pemahaman awal tentang teori dan fenomena trend dan lifestyle Initial understanding of trend and lifestyle theories and phenomena	Non SCL	
3	Gaya hidup, marketing dan kelayakan jual desain Produk Lifestyle, marketing and marketability of Product design	Case method	
4	Personality dan pencarian style Personality and style finding	Case method	
5	Buyer persona canvas & arahan gaya desain Buyer persona canvas & design style directions	Metode SCL lainnya	
6	Product value : nilai-nilai gaya hidup pada karya desain produk Product value: lifestyle values in product design	Non SCL © ©	
7	Proses ideasi dari nilai-nilai gaya hidup The process of ideation based on lifestyle values	Metode SCL lainnya	
8	Pemahaman metode penyusunan trendboard Understanding of composing trendboard methods	Team-based project	
9	ETS Midterm test	Metode SCL lainnya	
10	Membaca dan memahami trendboard Reading and Understanding Trendboard	Team-based project	
11	Metode pembuatan MOODBOARD yang terkait riset gaya hidup Method of making MOODBOARD related to lifestyle research	NonSCL ©	
12	Metode pembuatan MOODBOARD yang terkait riset gaya hidup Method of making MOODBOARD related to lifestyle research	Team-based project	
13	Selera, identity dan differensiasi dalam praktek gaya hidup Taste, identity and differentiation in lifestyle practice	Team-based project	
14	Gaya hidup dalam desain produk: Aspek visceral, Aspek behavioral, Aspek reflektif Lifestyle in product design: Visceral aspects, behavioral aspects, reflective aspects	Non SCL	
15	Review materi kuliah Course materials review	Non SCL	
16	EAS Final test	Team-based project	
	Bahasa Indonesia		
	English	Choose method ▼	

🛆 Set Permanent of LO, CLO, and Assessment & Evaluation Plan



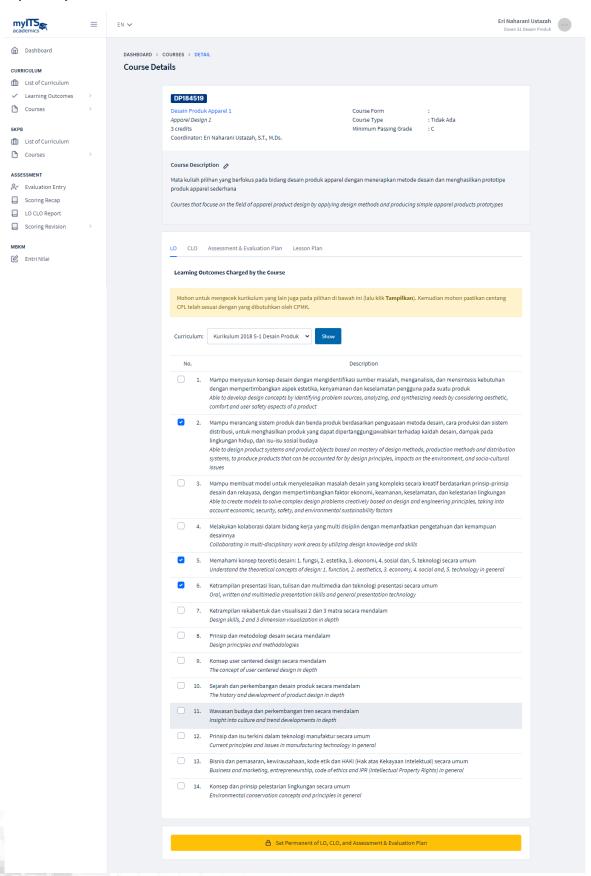
# Apparel Product Design 1

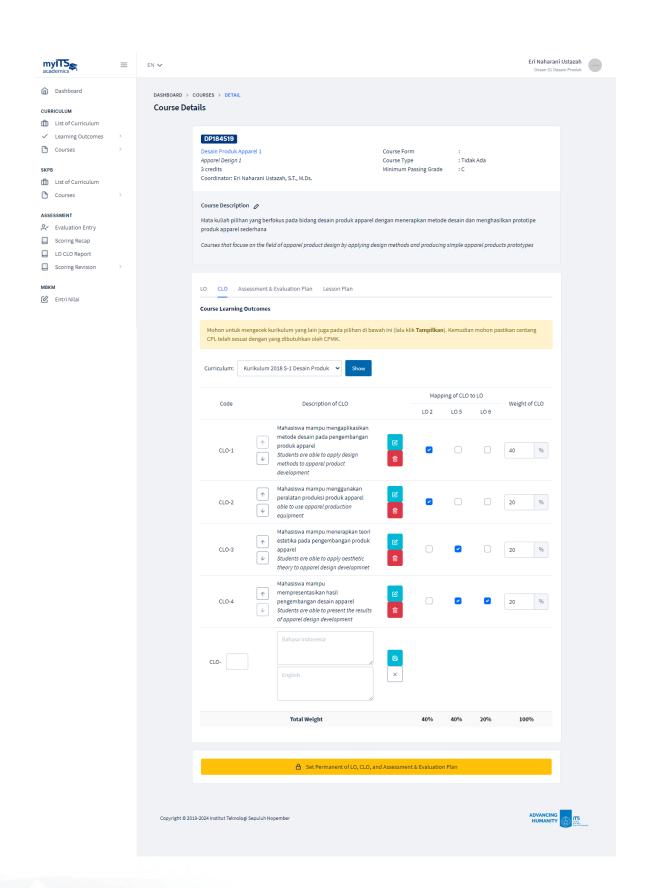
## **DESCRIPTION OF COURSE UNIT**

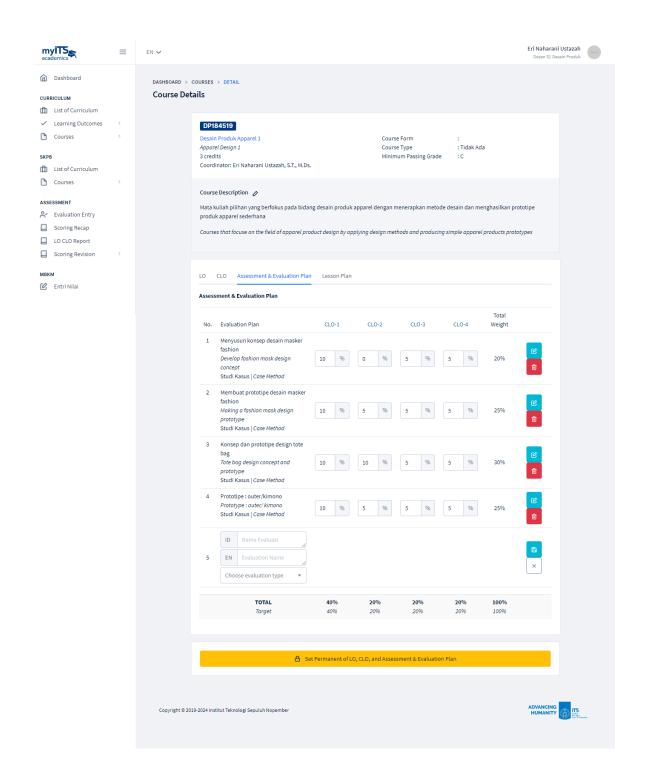


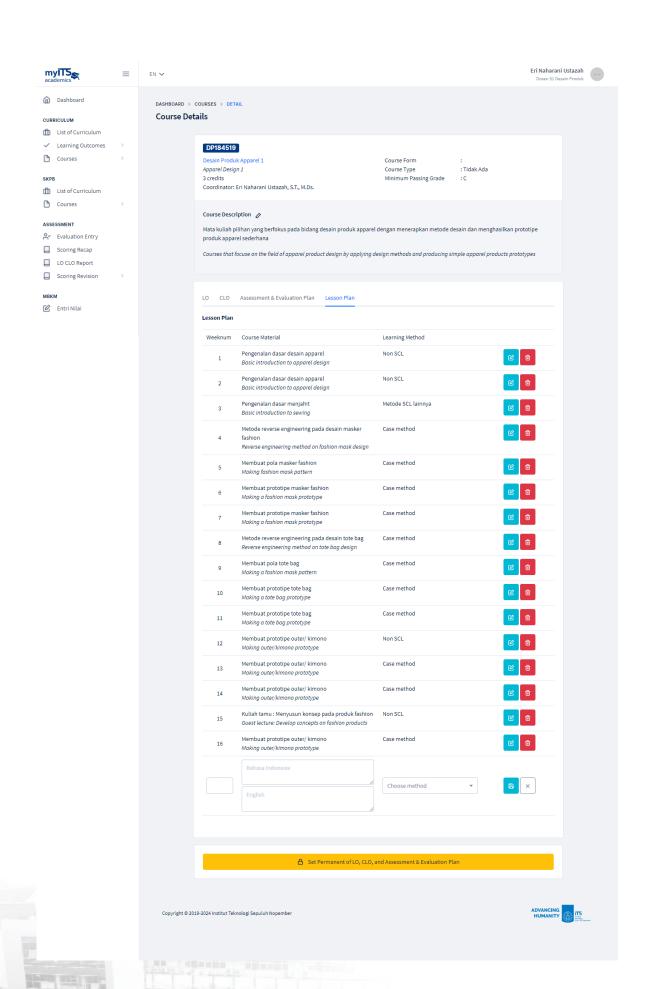
Course unit title	Apparel Design 1
Course unit code	DP184519
Type of course unit	Elective
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	3 <sup>rd</sup> year
Semester/trimester when the course unit is delivered	5 <sup>th</sup> semester
Number of ECTS credits allocated	4,8 ECTS Credits
Name of lecturer	Eri Naharani Ustazah, S.T., M.Ds.
Learning outcomes of the course unit	<ul> <li>student will be able to apply Design Thinking metho in fashion / apparel case</li> <li>student will be able to make: Design Brief, Moodboard dan Style guide</li> <li>student will be able to assembly product by using reverse engineering method</li> <li>student will be able to show their idea through: Thumbnail sketch, Alternatif Desain dan Desain Final</li> <li>student will be able to make Study/Form Model,</li> <li>student will be able to do iteration, development, dan presentation prototype</li> <li>student will be able to calculate Bill of Materials (BOM)</li> <li>students will be able to show their design work in an exhibiton with shop etiquette</li> </ul>
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	In this course, student learn to conduct design project that is related to function and aesthetics in simple fashion product such as: simple pouch  1. Introduksi: history, designer icon, design works 2. Basic theory: design thinking, concept, creative eksploration and study model, material, finishing 3. Design Brief: Image, inspiration, mood board, Style guide, Identify the Opportunity for a New Product 4. Research: Perform Product Research & reverse Engineering 5. Concept: Idea sketch, refine sketch, thumbnail

Recommended or required reading and other learning	sketch, design alternative dan final design 6. Iteration: Create 3D Model, Study/Form, Model prototype 7. Iteration: Development, Presentation prototype 8. Bill of Materials, Production, material & process, shop etiquette • Burke, Sandra.2012.Fashion Designer-Concept to Collection. London: Burke publishing
resources/tools	<ul> <li>Charlotte &amp; Peter Fuell, Industrial Design A-Z, Taschen, 2000</li> <li>Charlotte &amp; Peter Fuell, Designing The 21st Century, Taschen, 2001</li> <li>Design Secrets: Products, Rocport Publisher. Inc., 2001</li> <li>Krome, Barrat, Logic and Design, George Godwin Ltd. 1980</li> <li>Larsen, Jack Lenor, Design Since 1945, Philadelphia Museum of Art Rizzoli, New York, 1983</li> <li>Pearce, Peter, Experiments in Form, V.N, Reinhold Co. 1980</li> <li>William, Christoper, Origin of Form, Arch Book Co, New York, 1981</li> </ul>
Planned learning activities and teaching methods	Case Method
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation







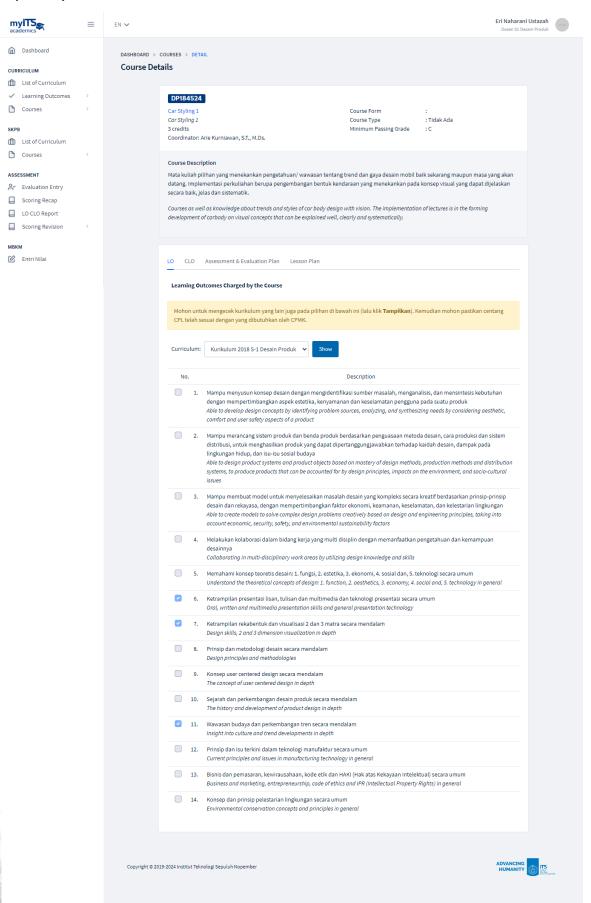


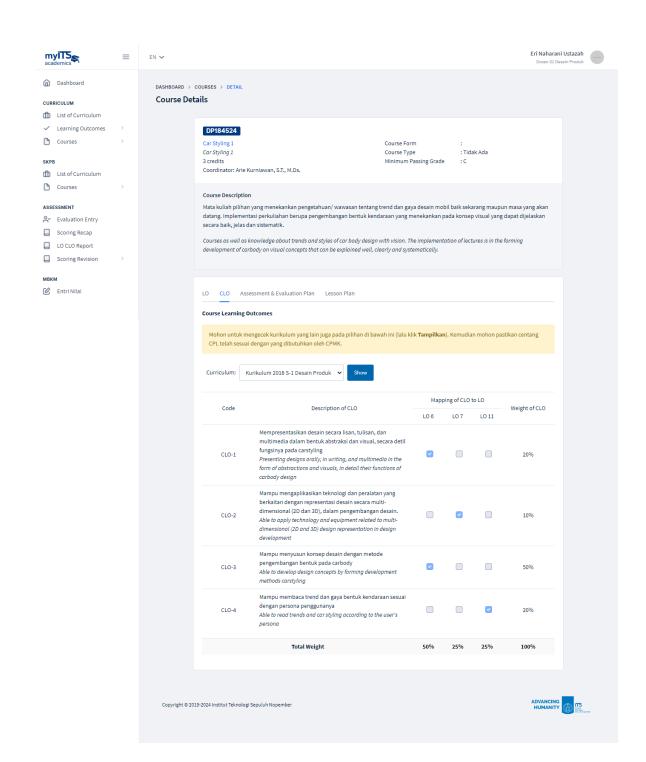


# Carstyling 1 DESCRIPTION OF COURSE UNIT

Course unit title	Carstyling 1
Course unit code	DP184524
Type of course unit	Elective
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	3 <sup>rd</sup> year
Semester/trimester when the course unit is delivered	5 <sup>th</sup> semester
Number of ECTS credits allocated	4,8 ECTS Credits
Name of lecturer	Arie Kurniawan, S.T., M.Ds.
Learning outcomes of the course unit	<ul> <li>Presenting designs orally, in writing, and multimedia in the form of abstractions and visuals, in detail their functions of carbody design</li> <li>Able to apply technology and equipment related to multi-dimensional (2D and 3D) design representation in design development</li> <li>Able to develop design concepts by forming development methods carstyling</li> <li>Able to read trends and car styling according to the user's persona</li> </ul>
Mode of delivery	face-to-face
Prerequisites and co-requisites (if applicable)	-
Course content	Courses as well as knowledge about trends and styles of car body design with vision. The implementation of lectures is in the forming development of carbody on visual concepts that can be explained well, clearly, and systematically.
	<ol> <li>Insights into current trends in car design, designers, and design works.</li> <li>Visual theory of car design.</li> <li>Platform analysis.</li> <li>Brand identity in car appearance.</li> <li>Consumer behavior, persona, and designer impression.</li> <li>Techniques for sketching and car design concepts.</li> <li>Car Design Concepts and Portfolio.</li> <li>Techniques for presenting car designs.</li> </ol>

Recommended or required reading and other learning resources/tools	<ul> <li>Leon G. Schiffman, Leslie Lazar Kanuk (2007),</li> <li>"Consumer Behaviour", Ninth Edition, Prentice Hall,</li> <li>Pearson Education, Inc, New Jersey.</li> </ul>
	<ul> <li>Nikolaos Gkikas (2013), "Automotive Ergonomics- Driver Vehicle Interaction", CRC Press, Taylor &amp; Francis Group, 6000 Broken Sound Parkway, NW Suite 300, Boca Raton, London.</li> </ul>
	<ul> <li>Stuart Macey, Geoff Wardley (2008), "H Point-The Fundamental of Car Design &amp; Packaging", Design Studio Press, Higuera Street, Culver City, California.</li> </ul>
	Eissen, Koos & Roselien Steur.2014. Sketching     Product Design Presentation, Amsterdam:BIS Publisher
Planned learning activities and teaching methods	Discovery Learning; Case Method; Team Based Learning
Language of instruction	Indonesia and English
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation





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CURRICULUM

List of Curriculum

✓ Learning Outcomes > Courses

List of Curriculum

Courses

ASSESSMENT

A Evaluation Entry

Scoring Recap LO CLO Report

Scoring Revision

🖆 Entri Nilai

DASHBOARD > COURSES > DETAIL

Course Details

DP184524

Car Styling 1 Car Styling 1 3 credits

Coordinator: Arie Kurniawan, S.T., M.Ds.

Course Form Course Type Minimum Passing Grade

: Tidak Ada

Course Description

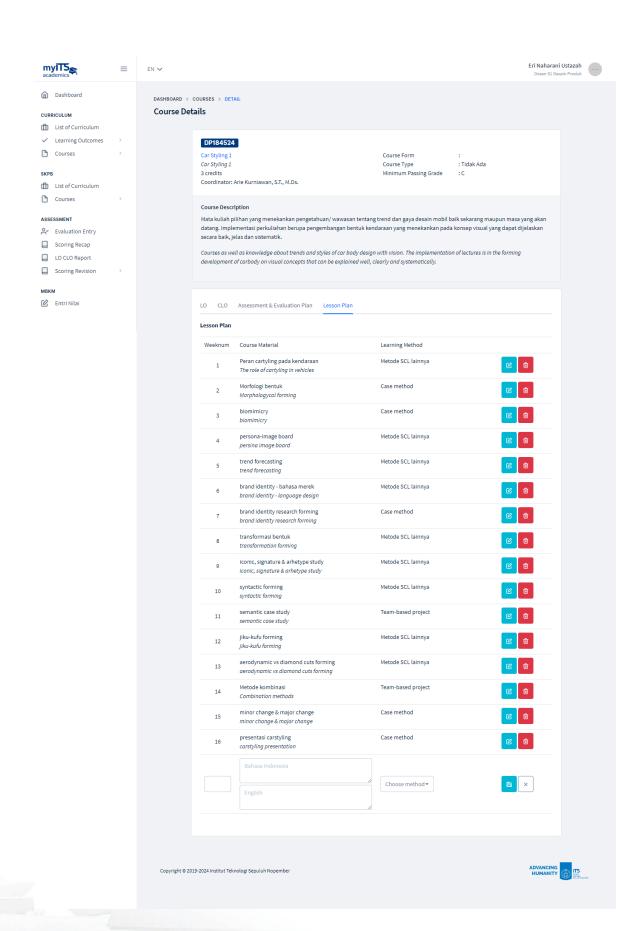
Mata kuliah pilihan yang menekankan pengetahuan/ wawasan tentang trend dan gaya desain mobil baik sekarang maupun masa yang akan datang. Implementasi perkuliahan berupa pengembangan bentuk kendaraan yang menekankan pada konsep visual yang dapat dijelaskan secara balik, jelas dan sistematik.

Courses as well as knowledge about trends and styles of car body design with vision. The implementation of lectures is in the forming development of carbody on visual concepts that can be explained well, clearly and systematically.

LO CLO Assessment & Evaluation Plan Lesson Plan

No.	Evaluation Plan	CLO-1	CLO-2	CLO-3	CLO-4	Total Weight
1	pengembangan bentuk morphology morphologycal forming Studi Kasus   Case Method	0%	196	5%	0%	6%
2	pengembangan bentuk biomimicry biomimicry forming Studi Kasus   Case Method	0%	1%	596	096	696
3	persona persona Studi Kasus   Case Method	5%	196	5%	5%	16%
4	identitas merek kendaraan brand identityt Studi Kasus   Case Method	5%	196	5%	5%	16%
5	semiotika semiotics Studi Kasus   <i>Case Method</i>	0%	196	5%	096	6%
6	batasan manufaktur manufactur analysis Studi Kasus   Case Method	0%	196	5%	096	6%
7	studi kasus desain mobil case study carstyling Studi Kasus   Case Method	5%	296	10%	5%	22%
8	strategi pengembangan bentuk minor mayor minor & major change Kognitif - Tugas   Cognitive - Assignment	5%	2%	10%	5%	22%
	TOTAL	20%	10%	50%	20%	100%





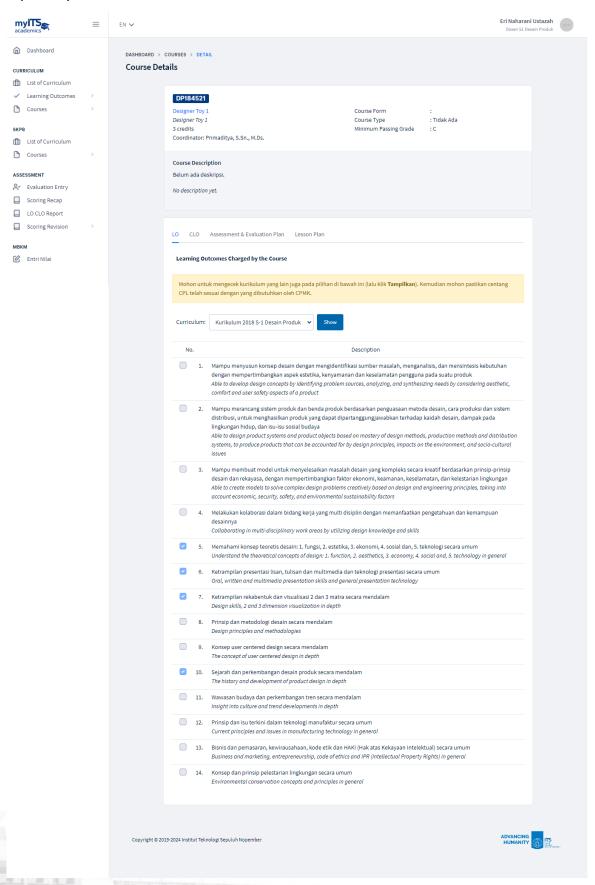


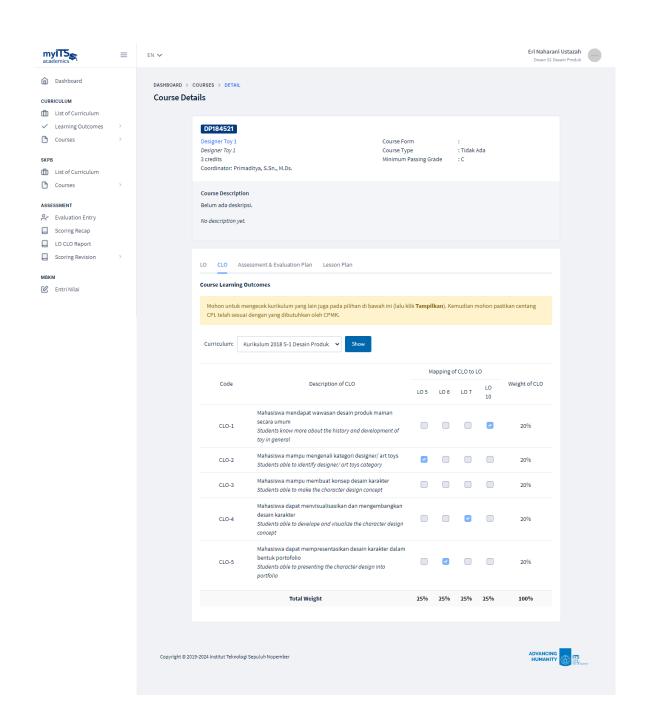
# Desainer toy 1 DESCRIPTION OF COURSE UNIT

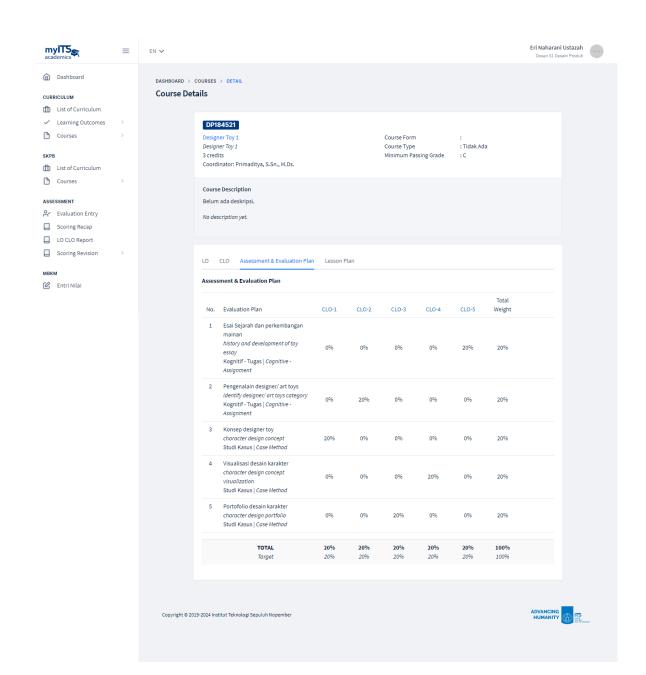


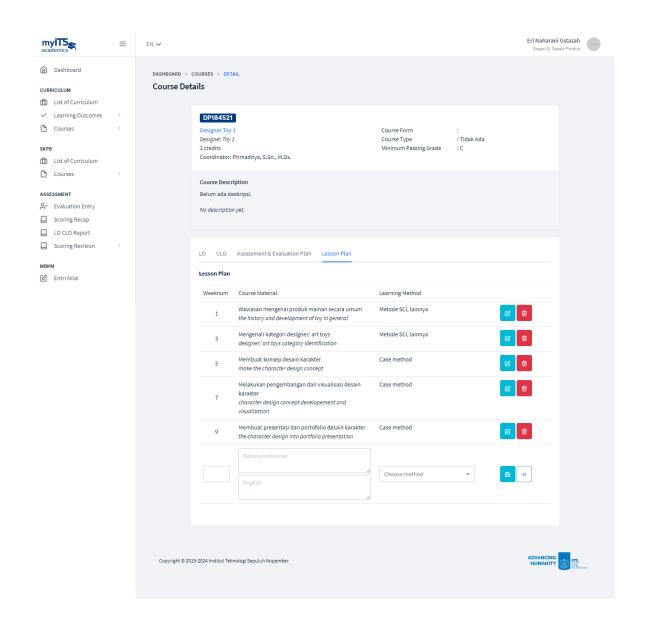
Course unit title	Toy Design 1
Course unit code	DP184521
Type of course unit	Elective
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	3 <sup>rd</sup> year
Semester/trimester when the course unit is delivered	5 <sup>th</sup> semester
Number of ECTS credits allocated	4,8 ECTS Credits
Name of lecturer	Primaditya, S.Sn., M.Ds.
Learning outcomes of the course unit	Students will be able to create designer toy concepts and character design proposals with the output being a proposal and portfolio
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	Study on Toys Created from Personal Sensitivity, Excluding Toys Produced for Film, Comic, and Game Sales Purposes. Specifically, toys in the form of limited edition tri-matra figures.  • Design Character Research:
	<ul> <li>Designer toy identification.</li> <li>Character merchandising</li> <li>Design Character Research:</li> <li>Character Design Visualization.</li> <li>Character Design Presentation.</li> <li>Character Design Portfolio.</li> </ul>
Recommended or required reading and other learning resources/tools	<ul> <li>Budnitz, Paul, I am plastic: the designer toy explosion, Abrams - 2006</li> <li>Hakim, Primaditya, Development of Designer-toy by Utilizing WoodWaste, 2013</li> <li>Phoenix, W, Plastic culture: how Japanese toys conquered the world, 2006</li> </ul>
Planned learning activities and teaching methods	Case Method

Language of instruction	Indonesia
1	Assignment, Project, Midterm Evaluation and Final Evaluation





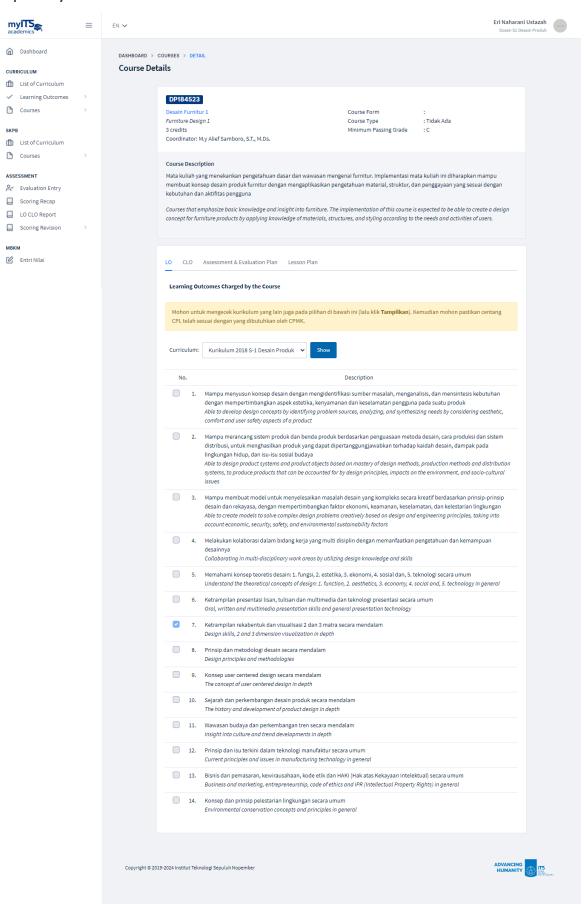


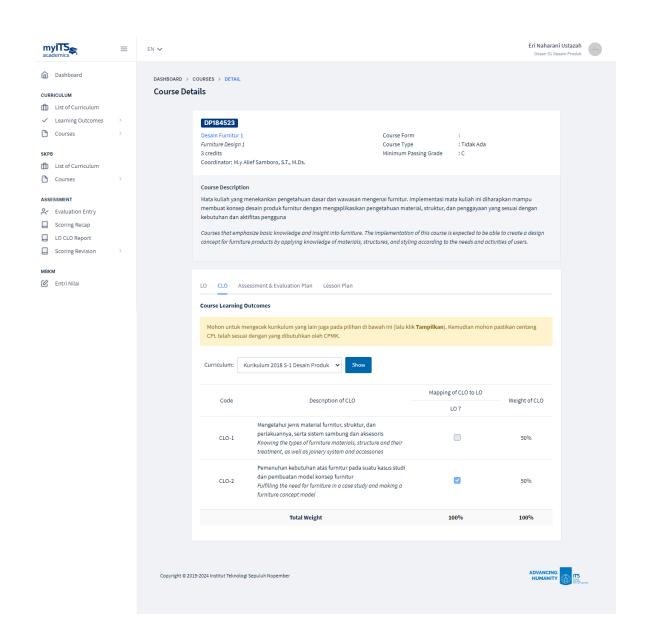




# Furniture Design 1 DESCRIPTION OF COURSE UNIT

Course unit title	Furniture Design 1
Course unit code	Kode
Type of course unit	Elective
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	3 <sup>rd</sup> year
Semester/trimester when the course unit is delivered	5 <sup>st</sup> semester
Number of ECTS credits allocated	4,8 ECTS Credits
Name of lecturer	M.y Alief Samboro, S.T., M.Ds.
Learning outcomes of the course unit	<ul> <li>Knowing the types of furniture materials, structure and their treatment, as well as joinery system and accessories</li> <li>Fulfilling the need for furniture in a case study and making a furniture concept model</li> </ul>
Mode of delivery	face-to-face
Prerequisites and co-requisites	Courses that emphasize basic knowledge and insight into furniture. The implementation of this course is expected to be able to create a design concept for furniture products by applying knowledge of materials, structures, and styling according to the needs and activities of users.
Course content	Penjabaran RPS
Recommended or required reading and other learning resources/tools	
Planned learning activities and teaching methods	Discovery Learning; Case Method
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation





n Dashboard

CURRICULUM

List of Curriculum ✓ Learning Outcomes >

Courses

List of Curriculum

Courses

ASSESSMENT

A Evaluation Entry

Scoring Recap LO CLO Report

Scoring Revision

🖆 Entri Nilai

DASHBOARD > COURSES > DETAIL

### Course Details

DP184523

Furniture Design 1
3 credits
Coordinator: M.y Allef Samboro, S.T., M.Ds.

Course Form Course Type Minimum Passing Grade

: Tidak Ada

Course Description

Mata kuliah yang menekankan pengetahuan dasar dan wawasan mengenai furnitur. Implementasi mata kuliah ini diharapkan mampu membuat konsep desain produk furnitur dengan mengaplikasikan pengetahuan material, struktur, dan penggayaan yang sesuai dengan kebutuhan dan aktifitas pengguna

Courses that emphasize basic knowledge and insight into furniture. The implementation of this course is expected to be able to create a design concept for furniture products by applying knowledge of materials, structures, and styling according to the needs and activities of users.

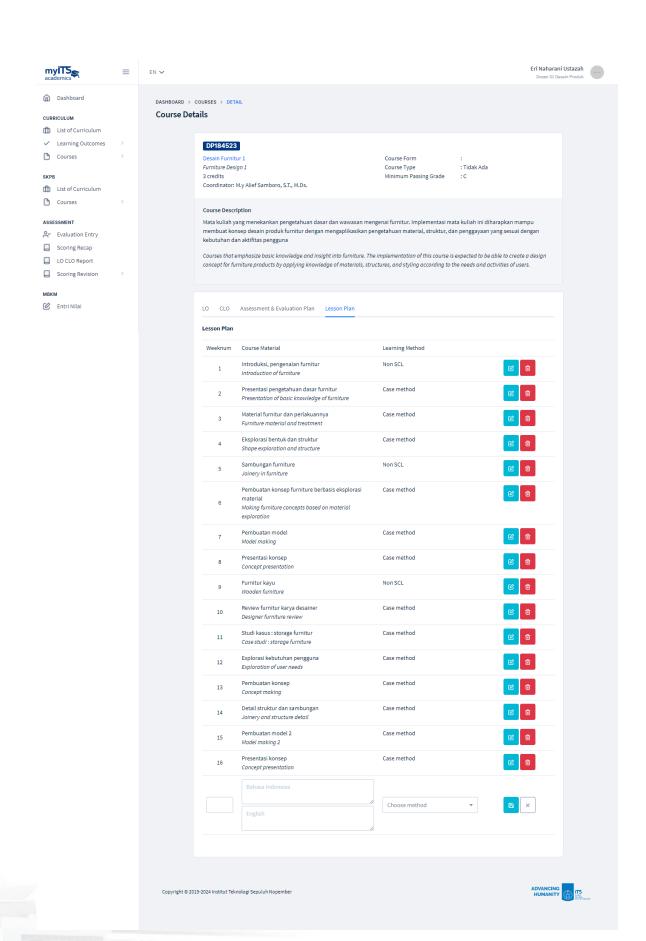
LO CLO Assessment & Evaluation Plan Lesson Plan

Assessment & Evaluation Plan

No.	Evaluation Plan	CLO-1	CLO-2	Weight
1				weight
	Pre-Test Pengetahuan Furnitur			
	Furniture Knowledge Pre-Test	10%	0%	10%
	Kognitif - Tugas   Cognitive -	2070	0,0	2070
	Assignment			
2	Pengetahuan material			
	Material knowledge	10%	0%	10%
	Studi Kasus   Case Method			
3	Pengetahuan sistem sambung			
	dan struktur			
	Joinery system and structure	10%	0%	10%
	knowledge			
	Studi Kasus   Case Method			
4	Konsep furnitur			
	Furniture concept	5%	10%	15%
	Studi Kasus   Case Method			
5	Presentasi model			
	Model presentation	5%	15%	20%
	Studi Kasus   Case Method			
6	Konsep furniture 2			
	Furniture concept 2	5%	10%	15%
	Studi Kasus   Case Method			
7	Presentasi model 2			
	Model presentation 2	5%	15%	20%
	Studi Kasus   Case Method			
TOTAL		50%	50%	

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# Jewelry Design 1 DESCRIPTION OF COURSE UNIT



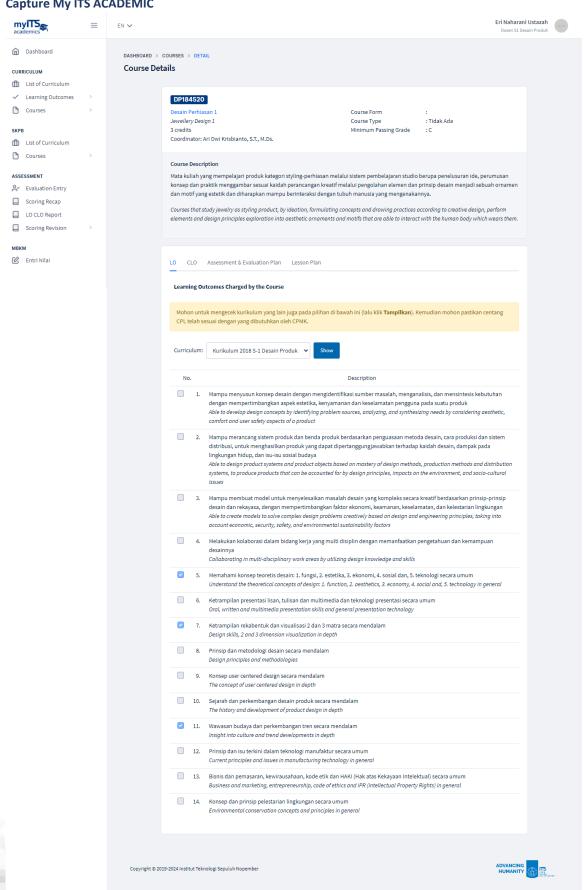
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

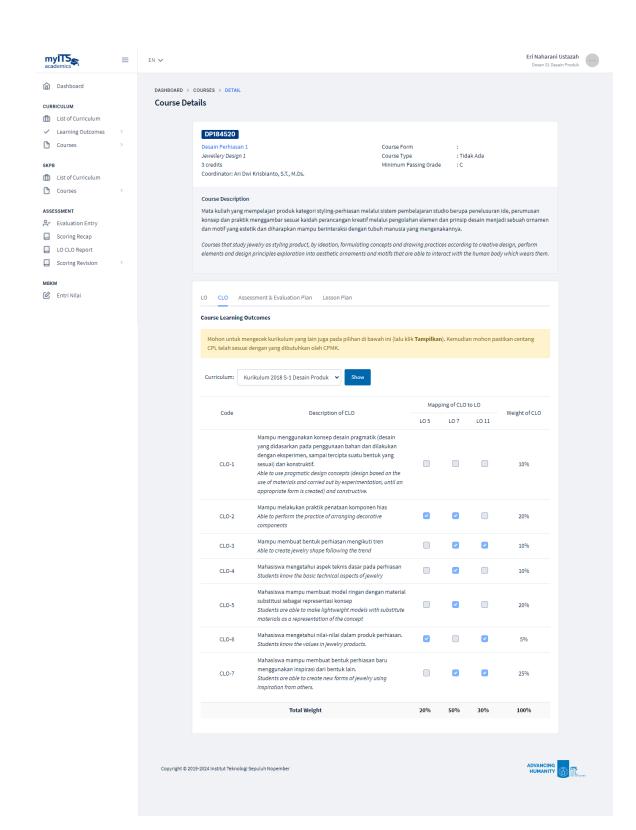
Course unit title	Jewelry Design 1
Course unit code	DP184520
Type of course unit	Elective
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	3 <sup>rd</sup> year
Semester/trimester when the course unit is delivered	5 <sup>th</sup> semester
Number of ECTS credits allocated	4,8 ECTS Credits
Name of lecturer	Ari Dwi Krisbianto, S.T., M.Ds.
Learning outcomes of the course unit	<ul> <li>Students capable to design jewelry with ideas according on trend and create shape inovation</li> <li>Students capable to develop creativity by using around materials to enhance the value in jewelry shape</li> <li>Students capable to produce jewelry by themselves uniquely and saleable</li> </ul>
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Recommended or required reading and other learning	Learning about basic method of craft jewelry designing start from ideation, presentation, technical evaluation and correction. Using trend and jewelry design evolution currently, both on technology and alternative material which can be produced by simple technology.  1. Jewelry basic (philosophy and history) 2. Type of jewelry 3. Jewelry components 4. Jewelry presentation technic 5. Digital modeling and evaluation 6. Jewelry prototyping  • Olver, E. (2002). The Art of Jewelry Design: From Idea to Reality. Northlight
resources/tools	Pinkas, Anna. (2017). Digital Handmade:     Craftmanships in the New Industrial Revolution, by Lucy Johnston
Planned learning activities and teaching methods	Discovery Learning; Case Method

Language of instruction	Indonesia
1	Assignment, Project, Midterm Evaluation and Final Evaluation

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CURRICULUM

List of Curriculum ✓ Learning Outcomes >

Courses

List of Curriculum

Courses

ASSESSMENT

△ Evaluation Entry Scoring Recap

LO CLO Report

Scoring Revision

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Course Details

DP184520

Jewellery Design 1 3 credits

Coordinator: Ari Dwi Krisbianto, S.T., M.Ds.

Course Form Course Type Minimum Passing Grade : Tidak Ada

Mata kuliah yang mempelajari produk kategori styling-perhiasan melalui sistem pembelajaran studio berupa penelusuran ide, perumusan konsep dan praktik menggambar sesuai kaidah perancangan kreatif melalui pengolahan elemen dan prinsip desain menjadi sebuah ornamen dan motif yang estetik dan diharapkan mampu berinteraksi dengan tubuh manusia yang mengenakannya.

Courses that study jewelry as styling product, by ideation, formulating concepts and drawing practices according to creative design, perform elements and design principles exploration into aesthetic ornaments and motifs that are able to interact with the human body which wears them.

ess	ment & Evaluation Plan								
٥.	Evaluation Plan	CLO-1	CLO-2	CLO-3	CLO-4	CLO-5	CLO-6	CLO-7	Total Weight
	Sketsa dan Alternatif Sketches and Alternatives Studi Kasus   Case Method	2%	2%	2%	0%	0%	096	4%	10%
	Menata Batu Pulung Bentuk Bunga dan Batu Arranging Stones Studi Kasus   Case Method	0%	5%	0%	5%	0%	096	096	10%
	Produk Perhiasan Polymer Clay Polymer Clay Jewelry Hasil proyek   Team-based Project	0%	0%	0%	0%	20%	0%	0%	20%
	Tugas contoh jewellery values Jewelery values sample assignment Studi Kasus   Case Method	5%	0%	0%	0%	0%	5%	096	10%
	Tugas desain variasi Variation design Studi Kasus   Case Method	1%	6%	0%	3%	0%	096	096	10%
	Perhiasan Kalung dengan Inspirasi bentuk Jewelry necklace from other Inspiration Hasil proyek   Team-based Project	0%	0%	0%	0%	0%	096	15%	1596
	Padu Padan Busana Fashion mix and match Studi Kasus   Case Method	0%	5%	5%	0%	0%	0%	5%	15%
	Portfolio Portfolio Kognitif - Tugas   Cognitive - Assignment	2%	2%	3%	2%	0%	096	196	10%
	TOTAL	10%	20%	10%	10%	20%	5%	25%	100%

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List of Curriculum ✓ Learning Outcomes > Courses SKPB List of Curriculum Courses ⇔ Evaluation Entry Scoring Recap LO CLO Report

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Scoring Revision

DASHBOARD > COURSES > DETAIL

### Course Details

### DP184520 Desain Perhiasan 1 Jewellery Design 1 3 credits Course Form Course Type Minimum Passing Grade : Tidak Ada Coordinator: Ari Dwi Krisbianto, S.T., M.Ds.

Mata kuliah yang mempelajari produk kategori styling-perhiasan melalui sistem pembelajaran studio berupa penelusuran ide, perumusan konsep dan praktik menggambar sesuai kaidah perancangan kreatif melalui pengolahan elemen dan prinsip desain menjadi sebuah ornamen dan motif yang estetik dan diharapkan mampu berinteraksi dengan tubuh manusia yang mengenakannya.

Courses that study jewelry as styling product, by ideation, formulating concepts and drawing proctices according to creative design, perform elements and design principles exploration into aesthetic ornaments and motifs that are able to interact with the human body which wears them.

	7135C33THCHCGCEVARGAGOTT RATE		
esson Plan			
Veeknum	Course Material	Learning Method	
1	Mengoleksi benda-benda atraktif sekitar untuk dijadikan point of interest dari produk perhiasan Collecting attractive objects from around to be used as points of interest for jewelry products	Case method	i ii
2	Mengolah material atraktif yang telah diambil menjadi lebih memiliki tingkat fungsionalitas untuk tahap eksplorasi berikutnya. Minimal memiliki fungsi perlindungan material atraktif dari impact luar dan ergonomi.  Processing the attractive moterial that has been taken into a more functional level for the next exploration stage. At a minimum, it has the function of protecting attractive materials from external impacts and ergonomics.	Case method @	â ê
3	Sistem sketsa dan penggambaran dalam penataan batu standar industri untuk tiap kasus bentuk bidang. Industry standard for sketching and drawing. Cose study: Stone setting	Case method E	â
4	Sistem mechanism and chains pada perhiasan sebagai fungsi rangkalan dan dekorasi Mechanism and chains system in jewelry as a function of connection and decoration	Case method	â
5	Eksplorasi bentuk dan motif perhiasan dengan membuat sketsa alternatif perhiasan (liontin atau cincin) Explore jewelry shapes and motifs by sketching jewelry alternatives (pendant or ring)	Case method @	â
6	Evaluasi tugas sketsa alternatif. Pengerucutan menuju desain final yang akan dimodelkan Evaluation of alternative sketch assignments. Pruning towards the final design to be modeled	Case method	î û
7	Asistensi pengembangan alternatif terpilih Selected alternative development assistance	Non SCL	
8	Perhiasan Polymer Clay Polymer Clay Jewelry	Team-based project	
9	Jewelry values Jewelry values	Case method	
10	Desain variasi Varlation design	Case method	
11	Material Populer dari Waktu ke waktu Popular Materials time by time	Metode SCL lainnya	
12	Jewelry Inspiration Jewelry Inspiration	Case method	
13	Dasar-dasar penyusunan Drafting basics	Case method	
14	Tren perhiasan Jewelry trends	Case method	<u> </u>
15	Padu padan busana Fashion mix and match	Case method	
16	Presentasi akhir Final presentation	Metode SCL lainnya	
	Bahasa Indonesia	Characterists of	
	English	Choose method ▼	×



# Medical Device 1 DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023

### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

Course unit title	Medical Device Design 1
Course unit code	DP184522
Type of course unit	Elective
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	3 <sup>rd</sup> year
Semester/trimester when the course unit is delivered	5 <sup>th</sup> semester
Number of ECTS credits allocated	4,8 ECTS Credits
Name of lecturer	Djoko Kuswanto, S.T., M.Biotech.
Learning outcomes of the course unit	<ol> <li>Students have insight and product design skills related to the field of medical devices.</li> <li>Students are able to increase the role and human needs for product design related to medical devices.</li> <li>Students are able to carry out the basic design process in developing medical devices.</li> <li>Students are able to carry out rapid prototyping and additive manufacturing processes for specialty medical devices &amp; equipment products.</li> <li>Students are able to conduct research and business opportunities in the field of medical device design.</li> </ol>
Mode of delivery	face-to-face
Prerequisites and co-requisites (if applicable)	-
Course content	This course aims to teach students to know and provide alternative designs for various types of assistive/adaptive technologies that address the various needs of persons with disabilities, understand and be able to do rapid prototyping & additive manufacturing, and understanding of ethical trials and clinical trials in the design of medical devices.
Recommended or required reading and other learning resources/tools	
Planned learning activities and teaching methods	Discovery Learning; Case Study; Team Based Learning

Language of instruction	Indonesia and English (Bahasa yang digunakan)
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

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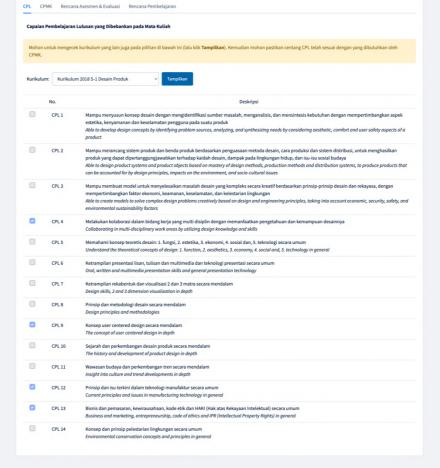
Ralat Nilai Laporan CPL Mahasiswa DASBOR > MATA KULIAH > DETAIL

### Detail Mata Kuliah



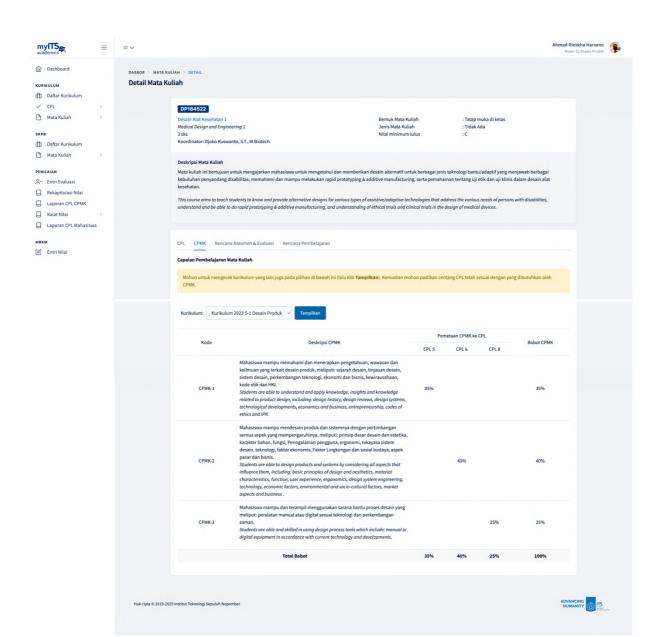
Mata kullah ini bertujuan untuk mengajarkan mahasiswa untuk mengetahui dan memberikan desain alternatif untuk berbagai jenis teknologi bantu/adaptif yang menjawab berbagai kebutuhan penyandang disabilitas, memahami dan mampu melakukan rapid prototyping & additive manufacturing, serta pemahaman tentang uji etik dan uji klinis dalam desain alat kesehatan.

This course aims to teach students to know and provide alternative designs for various types of assistive/adaptive technologies that address the various needs of persons with disabilities, understand and be able to do rapid prototyping & additive manufacturing, and understanding of ethical trials and clinical trials in the design of medical devices.



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### PENILAIAN

0	Entri Evaluasi	
	Rekapitulasi Nilai	
	Laporan CPL CPMK	
	Ralat Nilai	>

### Laporan CPL Mahasiswa

MBKM

Entri Nilai

DP234530			
Alat Kesehatan	Bentuk Mata Kuliah	: Tatap muka di kelas	
Medical Equipments	Jenis Mata Kuliah	: Program Studi	
3 sks	Nilai minimum lulus	:C	
Koordinator: Djoko Kuswanto, S.T., M.Biotech.			

Deskrips Mata Kuliah

Mata kuliah ini bertujuan untuk mengajarkan mahasiswa untuk mengetahui dan memberikan alternatif desain pada berbagai jenis alat kesehatan termasuk teknologi bantu/adaptif,
memahami dan mampu melakukan rapid prototyping berbasis digilaf barication, serta pemahaman tentang uji etik dan uji klinis dalam desain alat kesehatan.

This course aims to teach students to know and provide design alternatives for various types of medical devices including assistive/adaptive technology, understand and be able to corry out rapid prototyping based on digital fabrication, as well as an understanding of ethical testing and clinical trials in medical device design.

ncana Asesmen & Evaluasi				
lo. Rencana Evaluasi	CPMK-1	CPMK-2	СРМК-3	Total Bobot
L Keaktifan dan Sikap Ilmiah				
Academic Activity and Attitude	5%	5%	0%	10%
Kognitif - Tugas   Cognitive - Assignment				
2 Identifikasi Masalah dan Urgensi				
Identification of Problems and Urgency	10%	10%	0%	20%
Studi Kasus   Case Method				
3 Proses Pengembangan Desain				
Design Develpment Process	0%	10%	0%	10%
Studi Kasus   Case Method				
4 Prototip Produk				
Product Prototype	0%	0%	25%	25%
Hasil proyek   Team-based Project				
5 Bisnis Desain Kanvas, Etik dan HKI				
Canvas Design Business, Ethics and IPR	20%	15%	0%	35%
Hasil proyek   Team-based Project				
TOTAL	35%	40%	25%	100%
Target	35%	40%	25%	100%



Laporan CPL Mahasiswa

Entri Nilai

DP184522
Desain Alat Kesehatan 1
Medicol Design and Engineering 1
3 sks
Koordinator: Djoko Kuswanto, S.T., M. Biotech. Bentuk Mata Kuliah : Tatap muka di kelas Jenis Mata Kuliah : Tidak Ada Nilai minimum lulus : C

Mata kulah ini bertujuan untuk mengajarkan mahasiswa untuk mengetahui dan memberikan desain alternatif untuk berbagai Jenis teknologi bantu/adaptif yang menjawab berbagai kebutuhan penyandang disabilitas, memahami dan mampu melakukan rapid prototyping & additive manufacturing, serta pemahaman tentang uji etik dan uji klinis dalam desain alat kesehatan.

This course aims to teach students to know and provide alternative designs for various types of assistive/adaptive technologies that address the various needs of persons with disabilities, understand and be able to do rapid prototyping & additive manufacturing, and understanding of ethical trials and clinical trials in the design of medical devices.

ncana Pembelajaran				
ggu ke-	Materi Perkuliahan	Metode Pembelajaran		
1	Pengantar Desain Alat & Peralatan Medis. Introduction to Medical Devices & Equipment Design.	Non SCL		
2	Teknologi Asistif dan Adaptif. Assistive and Adaptive Technology.	Non SCL		
3	Focus Group Discussion studi medis kasus nyata (teknologi asistif dan adaptit) Focus Group Discussion of real case medical studies (assistive and adaptive technology)	Case method		
4	Focus Group Discussion studi medis kasus nyata (teknologi asistif dan adaptif) Focus Group Discussion of real case medical studies (assistive and adaptive technology)	Case method		
5	Proyek Desain Alat & Peralatan Medis.  Medical Devices & Equipment Design Project.	Team-based project		
6	Proyek Desain Alat & Peralatan Medis Medical Devices & Equipment Design Project.	Team-based project		
7	Proyek Desain Alat & Peralatan Medis. Medical Devices & Equipment Design Project.	Team-based project		
8	Proyek Desain Alat & Peralatan Medis. Medical Devices & Equipment Design Project.	Team-based project		
9	Proyek Desain Alat & Peralatan Medis. Medical Devices & Equipment Design Project.	Team-based project		
10	Proyek Desain Alat & Peralatan Medis. Medical Devices & Equipment Design Project.	Team-based project		
11	Alur Kerja Desain Digital Terintegrasi Integrated Digital Design Workflow	Metode SCL lainnya		
12	Pembuatan Prototipe & Aditif Cepat.  Rapid Prototyping & Additive Manufacturing.	Metode SCL lainnya		
13	Pembuatan Prototipe & Aditif Cepat.  Rapid Prototyping & Additive Manufacturing.	Metode SCL lainnya		
14	Proposal uji coba etis dan uji klinis dalam desain perangkat medis. Ethical trials and clinical trials proposal in the design of medical devices.	Metode SCL lainnya		
15	Bisnis Desain Kanvas, Etik dan HKI Canvas Design Business, Ethics & Intelectual Property Right	Non SCL		
16	Ujian Akhir Mahasiswa Fingl Exam	Metode SCL lainnya		

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# 6th SEMESTER

Bachelor of Industrial Design (BOID)





# Product Design 3 DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



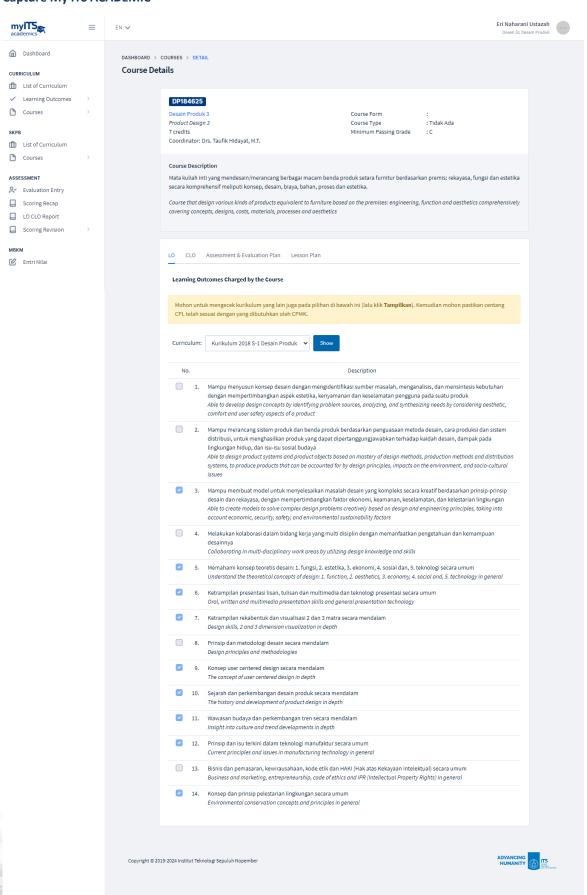
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

Course unit title	Product Design 3
Course unit code	DP184625
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	5 <sup>th</sup> year
Semester/trimester when the course unit is delivered	6 <sup>th</sup> semester
Number of ECTS credits allocated	11,2 ECTS Credits
Name of lecturer	Drs. Taufik Hidayat, M.T.
Learning outcomes of the course unit	Students will be able to design various products equivalent to furniture based on comprehensive premises: engineering, functionality, and aesthetics (concept, design, costing, materials, processes, and aesthetics).
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	Product Design 3 is a core course that covers designing products equivalent to furniture with the premises of engineering, functionality, and aesthetics.  • Introduction to furniture product design and analyzing phenomena related to product design problems.  • Title creation, problem definition, and limitations.  • Search for methods suitable for the problem.  • Types of joints: wood, rattan, metal, and others.  • Types of furniture accessories and/or furniture.  • Preservation processes for natural materials (wood, rattan)  • Furniture manufacturing processes and finishing.  • Types of simple mechanics in furniture.  • Introduction to several material characteristics.  • Methods of analysis - problem-solving analysis.  • Furniture design concepts.  • Functionality premises: Needs, activities, anthropometrics, ergonomics, weight and volume, layout, study of item treatment/nature of the item.  • Engineering premises: Structure and construction,

Recommended or required reading and other learning resources/tools	mechanical movement, manufacturing processes, tools or machines, components or accessories, materials, and processes.  • Aesthetic premises: Form and color of designed furniture.  • Use of data from both psychological and sociological perspectives.  • Application of rule-based data in other furniture product designs.  • Prototype creation.  • Standardization of presentations, both verbal, visual, model, and/or prototype.  • Display and/or exhibition.  • Dreyfuss, Henry, 1999, The Measure of man, human factor in design, Whitney Library of Design, New York  • Alvin R. Tilley, 1993, The Measure of man and and woman, Human factors in design, The Whitney Library of design, New York  • Ernest, J, Mc Cormic, 1996, Human factor in ngineering and design, Tata Mc Graw-Hill, New York  • Kimberly, Elam, 2001, Geometry of design, studies ini Proportion and composition, Princeton Architectural Press, 37 East 7th Street, New York, new York 10003
Planned learning activities and teaching methods	Discovery Learning; Project Based Learning; Case Method
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

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â	Dashboard		DASHBOARD > (	COURSES > DETAIL
CUR	RICULUM		Course Det	ails
Ф	List of Curriculum			
/	Learning Outcomes	>		DP184625
	Courses	>		Desain Produk 3 Product Design 3
SKPE	3			7 credits
Ф	List of Curriculum			Coordinator: Drs. Taufik
	Courses	>		Course Description
ASSI	ESSMENT			Mata kuliah inti yang me
	Evaluation Entry			secara komprehensif me
	Scoring Recap			Course that design vario
	LO CLO Report			covering concepts, desig
	Scoring Revision	>		
мвк	м			LO CLO Assessm
C	Entri Nilai			Course Learning Outco
				Course Bearing Outer
				Mohon untuk menged CPL telah sesuai deng
				Curriculum: Kuriku
				Code
				Mampu tujuan n masalal akhir de CLO-1 permas Able to i benefits suitabili needs a
				Mahasis meliput kesinan kebutul CLO-2 kelengk Student

Course Form Course Type Minimum Passing Grade Hidayat, M.T. endesain/merancang berbagai macam benda produk setara furnitur berdasarkan premis: rekayasa, fungsi dan estetika eliputi konsep, desain, biaya, bahan, proses dan estetika. us kinds of products equivalent to furniture based on the premises: engineering, function and aesthetics comprehensively ns, costs, materials, processes and aesthetics nent & Evaluation Plan Lesson Plan cek kurikulum yang lain juga pada pilihan di bawah ini (lalu klik **Tampilkan**). Kemudian mohon pastikan centang <sub>t</sub>an yang dibutuhkan oleh CPMK. ılum 2018 S-1 Desain Produk 🔻 Show Mapping of CLO to LO Weight of Description of CLO LO3 LO5 LO6 LO LO9 LO 10 LO 11 LO LO 12 14 CLO ı mengidentifikasi urgensi, dan manfaat, batasan h, serta kesesuaian desain ngan kebutuhan dan salahan identify urgency, goals and problem limitations, and lity of the final design with and requirements problem swa mampu menganalisis i kesesuaian tolok ukur. bungan analisis dengan an, kewajaran dan apan kriteria desain. s are able to analyze including the suitability of benchmarks. continuity of analysis with needs, fairness and completeness of design criteria. Mampu mempresentasikan desain dalam bentuk abstraksi dan visual, secara detil fungsinya Able to present designs orally, in CLO-3 □ **☑ ☑** □ □ 15% writing, and multimedia in the form of abstractions and visuals, in detail their Mampu mengaplikasikan teknologi dan peralatan yang berkaitan dengan representasi desain secara multi-dimensional (2D dan 3D), dalam pengembangan desain Able to apply technology and CLO-4 15% equipment related to multidimensional (2D and 3D) desian representation, in design development Mampu mengusulkan solusi terbaik dengan mengevaluasi alternatif-desain, melakukan tes dan menyempurnakan solusi untuk menyelesaikan masalah desain berdasarkan pertimbangan manufaktur, efisiensi produksi CLO-5 Able to propose the best solution by evaluating design-alternatives, conducting tests and refining solutions to solve design problems based on manufacturing considerations, production efficiency Mampu membuat model dan prototipe sebagai bahan studi dan simulasi operasional dan aktivitas CLO-6 Able to make models and prototypes as study object, operational and activity simulations

11% 11% 11% 6% 17% 6% 17% 17% 6%

Total Weight

n Dashboard

CURRICULUM

List of Curriculum ✓ Learning Outcomes >

Courses

List of Curriculum

ASSESSMENT

A Evaluation Entry Scoring Recap

LO CLO Report

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🖆 Entri Nilai

DASHBOARD > COURSES > DETAIL

### Course Details

DP184625

Product Design 3 Coordinator: Drs. Taufik Hidayat, M.T. Course Form Course Type Minimum Passing Grade : Tidak Ada

### Course Description

Mata~kuliah~inti~yang~mendesain/merancang~berbagai~macam~benda~produk~setara~furnitur~berdasarkan~premis:~rekayasa,~fungsi~dan~estetikasecara komprehensif meliputi konsep, desain, biaya, bahan, proses dan estetika.

 $Course that design {\it various kinds of products equivalent to furniture based on the premises: engineering, function and aesthetics comprehensively}$ covering concepts, designs, costs, materials, processes and aesthetics

ess	sment & Evaluation Plan								
No.	Evaluation Plan	CLO-1	CLO-2	CLO-3	CLO-4	CLO-5	CLO-6	Total Weight	
1	Pemenuhan Kebutuhan dan Masalah Fulfillment of Needs and Problems Studi Kasus   Case Method	5%	0%	5%	0%	0%	0%	10%	
2	Ketajaman Analisis Desain Accuracy of Design Analysis Kognitif - Tugas   Cognitive - Assignment	0%	5%	0%	0%	2.5%	2.5%	10%	
3	Inovasi Produk Product innovation Kognitif - Tugas   Cognitive - Assignment	5%	0%	0%	0%	2.5%	2.5%	10%	
4	Mekanisme Sistem System mechanism Studi Kasus   Case Method	0%	0%	2.5%	2.5%	2.5%	2.5%	10%	
5	Material dan Struktur Material and Structure Studi Kasus   Case Method	2.5%	2.5%	0%	2.5%	0%	2.5%	10%	
6	Gambar Kerja dan Assembly Drawing and Assembling Kognitif - Tugas   Cognitive - Assignment	0%	0%	2.5%	5%	2.5%	0%	10%	
7	Struktur Laporan Report Structure Kognitif - Tugas   Cognitive - Assignment	2.5%	2.5%	5%	0%	0%	0%	10%	
8	Model/prototipe Model/prototype Hasil proyek   Team-based Project	0%	5%	0%	5%	10%	10%	30%	
	TOTAL Target	15% 15%	15% 15%	15% 15%	15% 15%	<b>20%</b>	<b>20%</b>	100% 100%	

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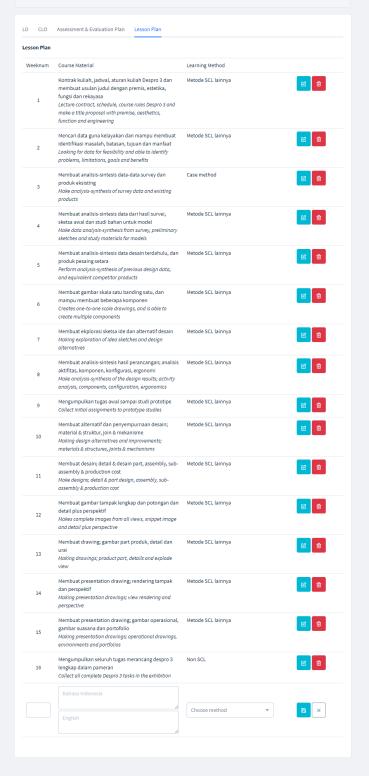




DASHBOARD > COURSES > DETAIL

Course Details

# DPIB4625 Desain Produk3 Froduct Design 3 Course Form: Course Type: Tidak Ada T credits Minimum Passing Grade: Coordinator: Drs. Taufik Hidayat, M.T. Course Description Mata kuliah inti yang mendesain/merancang berbagai macam benda produk setara furnitur berdasarkan premis: rekayasa, fungsi dan estetika secara komprehensif meliputi konsep, desain, biaya, bahan, proses dan estetika. Course that design vorious kinds of products equivalent to furniture bosed on the premises: engineering, function and oesthetics comprehensively covering concepts, designs, costs, moterials, processes and aesthetics







# Creativity DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



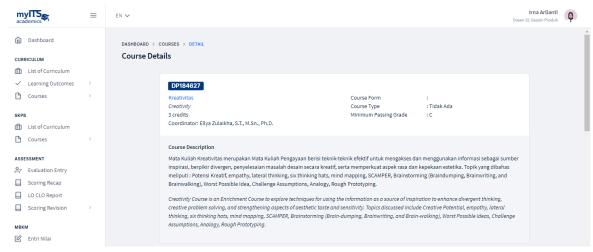
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

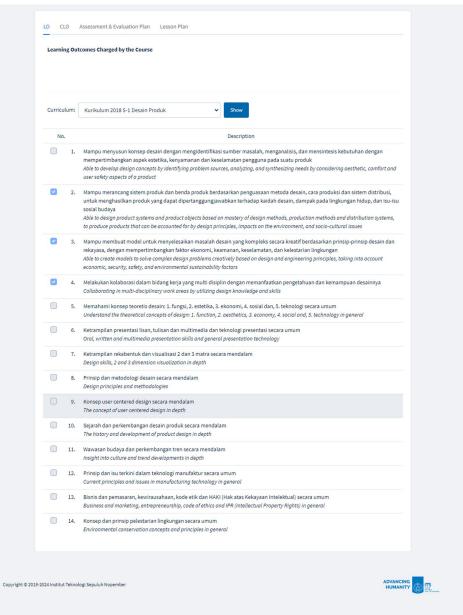
Course unit title	Creativity
Course unit code	DP184627
Type of course unit	Enrichment
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	3 <sup>rd</sup> year
Semester/trimester when the course unit is delivered	6 <sup>th</sup> semester
Number of ECTS credits allocated	4,8 ECTS Credits
Name of lecturer	Ellya Zulaikha, S.T., M.Sn., Ph.D.
Learning outcomes of the course unit	<ol> <li>Able to design products (or systems) with consideration of human behavior, environment, economy, security, safety, and social issues</li> <li>Able to operate design technology and equipment, both manual and digital, in an integrated and multi-dimensional way</li> <li>Able to research design problems using design principles and methods</li> <li>Able to implement design methods in the design process by considering various aspects such as human (user experience), environment, economic, security, safety, and social issues</li> <li>Able to apply design skills using interdisciplinary knowledge</li> </ol>
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	Creativity Course is an Enrichment Course to explore techniques for using the information as a source of inspiration to enhance divergent thinking, creative problem solving, and strengthening aspects of aesthetic taste and sensitivity. Topics discussed include Creative Potential, empathy, lateral thinking, six thinking hats, mind mapping, SCAMPER, Brainstorming (Braindumping, Brainwriting, and Brain-walking), Worst Possible Ideas, Challenge Assumptions, Analogy, Rough Prototyping.
	2) Six thinking hats (emphaty) 3) Assumption busting 4) Random word generation 5) Random word generation

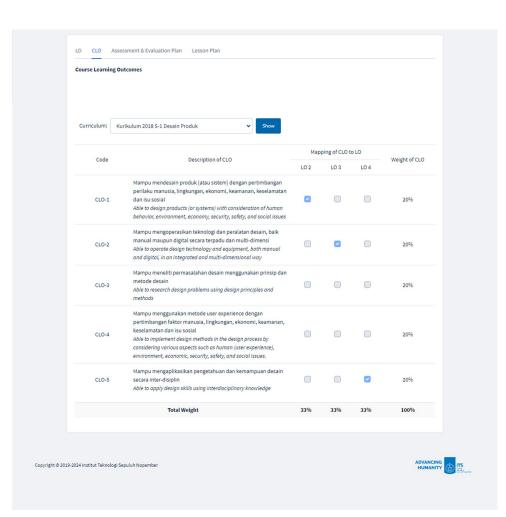
Recommended or required reading and other learning resources/tools  Planned learning activities and teaching methods	<ul> <li>6) Scamper</li> <li>7) Change perspective</li> <li>8) Reverse</li> <li>9) Lateral thinking</li> <li>10) Picture association</li> <li>11) Consensus mapping</li> <li>12) Snack writing</li> <li>13) Triggered brainwalking</li> <li>14) Analogy</li> <li>15) Project presentation</li> <li>De Bono, E. (2017). Six thinking hats. Penguin UK.</li> <li>De Bono, E., &amp; Zimbalist, E. (2010). Lateral thinking. Viking.</li> <li>De Bono, E. (2015). Serious creativity: How to be creative under pressure and turn ideas into action. Random House.</li> <li>De Bono, E. (2008). Creativity workout: 62 exercises to unlock your most creative ideas. Ulysses Press.</li> <li>Kahneman, D. (2011). Thinking, fast and slow. Macmillan</li> <li>Case method; Team Based Learning</li> </ul>	
	Indonesia and English	
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation	

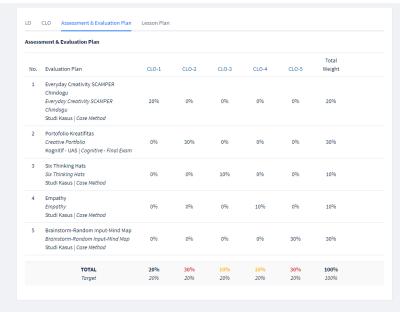
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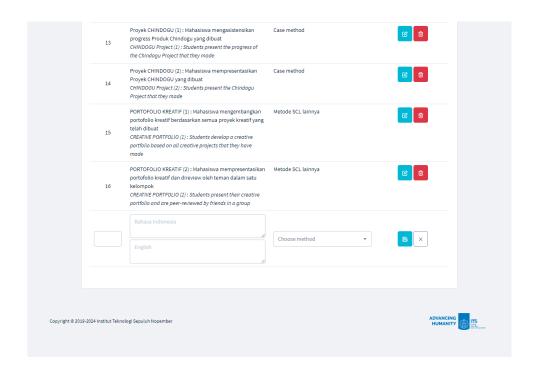




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	Assessment & Evaluation Plan Lesson Plan		
Lesson Plan			
Weeknum	Course Material	Learning Method	
1	Pengantar Kreativitas: Pada pertemuan pertama ini, mahasiswa akan membaham rencana perkuliahan dan saling mengenal satu sama lain. Siswa akan mengenali setiap potensi Kreativitas masing-masing melalui diskusi dan kontempisasi. Tujuan pengenalan adalah agar siswa terbiasa berinteraksi dan berkolaborasi dengan orang lain.  Introduction to Creativity: At this first meeting, students will understand the course plan and get to know each other. Students will recognize each potential for creativity by discussion and contemplation. The purpose of the introduction is for students to get used to interacting and collaborating with others.	Metode SCL lainnya	© O
2	Every Day Creativity: Sesi ini akan meningkatkan kepekaan siswa untuk mengenali masalah sehari-hari di sekitar mereka, apakah itu terkait dengan kepraktisan, kenyamanan, keamaan, keedamatan, keindahan, atau aspek lain, dan hal-hal yang mereka (atau orang lain) sukai atau tidak sukai. Siswa dapat memecahkan masalah sesuai dengan pengehahuan awal yang telah mereka miliki (Tidak harus canggih, percaya diri dan orisinalitas lebih pentingi. Pelajaran ini melatih siswa untuk menerapkan berpikir dan berperliaku kreatif. Every Day Creavity: This session will enhance students' sensitivity to recognize evenyday problems around them, whether it is related to procticality, comfort, security, safety, beauty, or other aspects, and things they for others) (ike or dislike. Students can solve problems according to their prior knowledge they already have (it doesn't hove to be sophisticated, confidence and originality is more important). This lesson to train students to apply creative thinking and behavior.	Case method	6
3	Pemetaan Pikiran (1): Mampu menemukan ide-ide baru/ unik menggunakan metode Pemetaan Pikiran secara berkelompok dan komprehensif (memikirkan sebanyak mungkin hubungan). Mahasiswa harus memilih 20 ide baru/ unik yang belum pernah ada, dan divisualisasikan Milad Mopping (1): Students Wille septore new and unique ideas using Mind Mopping in group, comprehensively (thinking obout possibile relationships as much as possible). Students must choose 20 new/unique ideas that have never existed, then visualize them	Case method	6
4	Pemetaan Pikiran (2): Mahasiswa menseleksi dan mengembangkan ide-ide yang diperoleh dari metode Mind Mapping Mind Mopping (2): Students able to select and develop ideas obtained from the Mind Mapping method.	Case method	e e
5	Empati : Empati sebagai Pemicu Kreativitas, Membuat Persona, dan Membuat Peta Empati Empathy : How Empathy Fuels Creativity, Making Persona and Empathy Map	Case method	C D
6	Lateral Thinking: cara berpikir mengedepankan alternatif-alternatif, mengakomodir kemungkinan sebanyak mungkin, sehinga terlatih untuk berpikir terbuka, berani berpikir kritis, analitis dan bisa menentukan arah. Lateral Tinking: a way of thinking that puts forward alternatives, occommodates as many possibilities as possible so that they are used to think openly, dare to think critically, analytically and can determine direction.	Metode SCL lainnya	<b>E</b>
7	Random Input: sebuah cara mencari hubungan dan membaca pola atas hubungan-hubungan yang terjadi antar hal, kemudian menentukan nilala tas hubungan yang terjadi ang dangan gang dangadi ang dangan gang terjadi ang dangan puta ang dangan put	Metode SCL lainnya	e de la constante de la consta
8	Brainstorming: metode berpikir kreatif secara lateral untuk mngeksplorasi dengan prinsip-prinsip yang benar, baik Brainstorming individual maupun Kelompok Brainstorming: creative thinking method to explore ideas, using the right brainstorming Alex Osborn principles, both Individual and Group Brainstorming	Metode SCL lainnya	<b>1 1 1 1 1 1 1 1 1 1</b>
9	Presentasi Proyek Kreatif Creative Project Presentation	Metode SCL lainnya	<b>B</b>
10	SCAMPER: teknik pencarian ide sebanyak-banyaknya (Alex Osborn), untuk mengembangkan produk yang sudah ada dengan cara Substitusi, Kombinasi, Adaptasi, Modifikasi, Penggunaan Lain, Eliminasi and Reverse. Mahasiswa akan mengembangkan satu produk atau jasa layanan berangkat dan produk yang sudah ada dengan minimal 7 kemungkinan pengembangan. SCAMPER: o way to explore os many ideas os possible by Alex Osborn techniques: Substitution, Combination, Adoptation, Modification, Other Uses, Elimination, and Reverse. Students will develop a product or service starting from a precedent product or service with a minimum of 7 development possibilities.	Case method	6
11	Six Thinking Hats: Sebuah Metode Edward de Bono untuk Evaluasi Desain / Kasus secara menyeluruh Metode Enom Topi: An Edward de Bono Method for Design/Case Evaluation	Case method	<b>E</b>
12	CHINDOGU: Metode mendesain produk secara bebas cara Kenji Kawakami untuk penyelesalan masalah sehari- hari CHINDOGU: Kenji Kowakami's method of designing	Case method	© Û





# Presentation Techniques DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



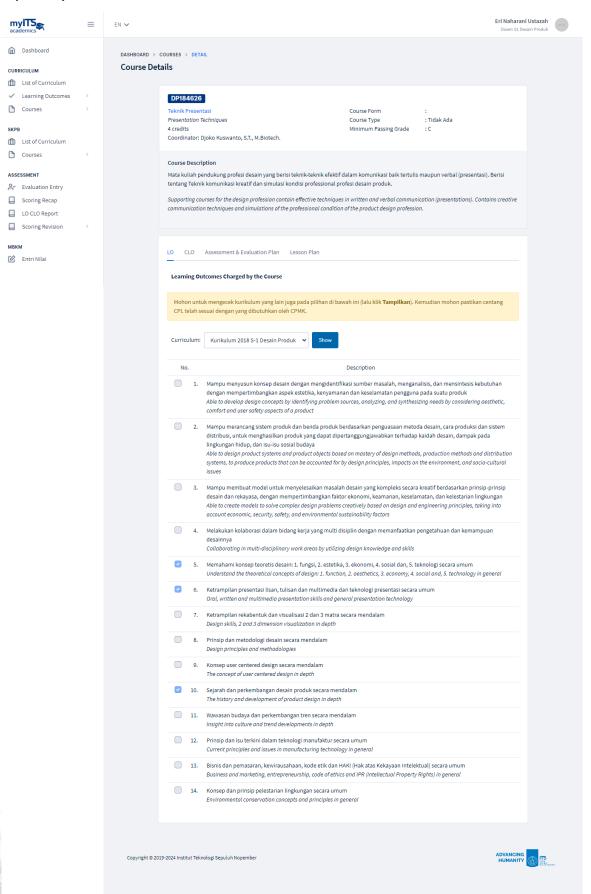
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

Course unit title	Presentation Techniques
Course unit code	DP184626
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	3 <sup>st</sup> year
Semester/trimester when the course unit is delivered	6 <sup>st</sup> semester
Number of ECTS credits allocated	6,4 ECTS Credits
Name of lecturer	Djoko Kuswanto, S.T., M.Biotech.
Learning outcomes of the course unit	<ol> <li>Students understand the theoretical concepts of design: 1. function, 2. aesthetics, 3. economics, 4. social and, 5. technology in general.</li> <li>Students can apply oral, written and multimedia presentation skills and general presentation technology.</li> <li>Students can convey design principles and methodologies that meet their needs in a structured and clear manner.</li> <li>Students can convey the history and development of product design as needed in a structured and clear manner.</li> </ol>
Mode of delivery	face-to-face
Prerequisites and co-requisites	
Course content	This enrichment course focuses on effective techniques in both written and verbal communication (presentation) and includes creative communication techniques and simulations of professional conditions in the product design profession.
	<ol> <li>Communication Theory.</li> <li>Verbal and Visual Communication Theory.</li> <li>Principles of visual communication in presentations.</li> <li>Semiotics Theory.</li> <li>Verbal Presentation Techniques.</li> <li>Sketching and Rendering Presentation Techniques.</li> <li>Concept Design Presentation.</li> <li>Detailed Engineering Design Presentation.</li> </ol>

Recommended or required reading and other learning resources/tools	<ul> <li>9) Animation and Multimedia Presentation.</li> <li>10) 3 Minutes Speech Technique.</li> <li>11) Portfolio Design.</li> <li>12) Simulation of Client Interaction.</li> <li>13) Exhibition and Product Display.</li> <li>Lawson, Bryan.2012. How Designers Think, London: The Architectural Press Ltd</li> <li>Lidwell, William, Kritina Holden and Jill Butler. 2003. Universal Principles of Design- 100 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design. Massachusetts: Rockport Publishers</li> <li>Mulyana, Deddy.2009. Ilmu Komunikasi,Bandung: PT.</li> </ul>
	Remaja Rosdakarya  • Ledden, Emma.2017. The Presentation Book, London: Pearson
	<ul> <li>Eissen, Koos &amp; Roselien Steur.2014.Sketching</li> <li>Product Design Presentation, Amsterdam:BIS Publisher</li> </ul>
Planned learning activities and teaching methods	Discovery Learning; Case Method
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

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CURRICULUM

List of Curriculum

✓ Learning Outcomes Courses

ff List of Curriculum

ASSESSMENT

A Evaluation Entry

Scoring Recap ☐ LO CLO Report

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DASHBOARD > COURSES > DETAIL

Course Details

DP184626

Presentation Techniques

Course Type Minimum Passing Grade

Course Form

: Tidak Ada

Coordinator: Dioko Kuswanto, S.T., M.Biotech,

Course Description

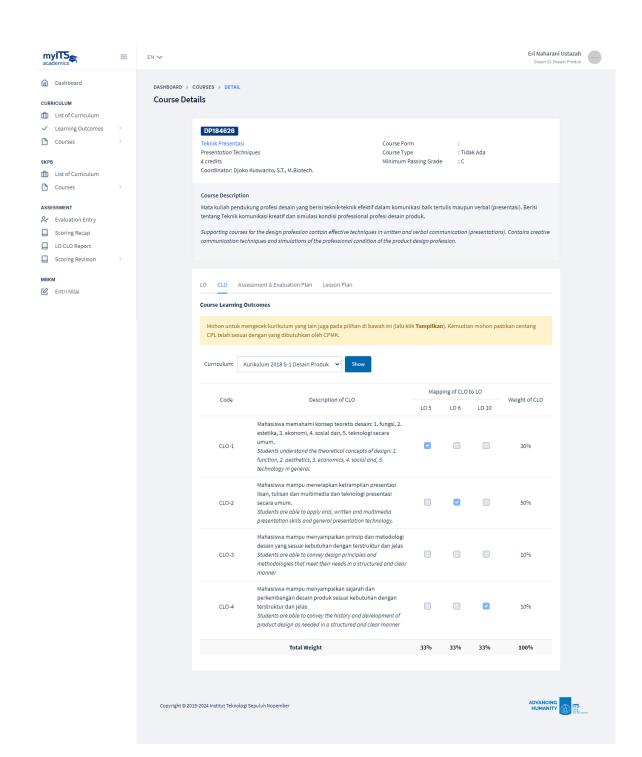
Mata kuliah pendukung profesi desain yang berisi teknik-teknik efektif dalam komunikasi baik tertulis maupun verbal (presentasi). Berisi tentang Teknik komunikasi kreatif dan simulasi kondisi professional profesi desain produk.

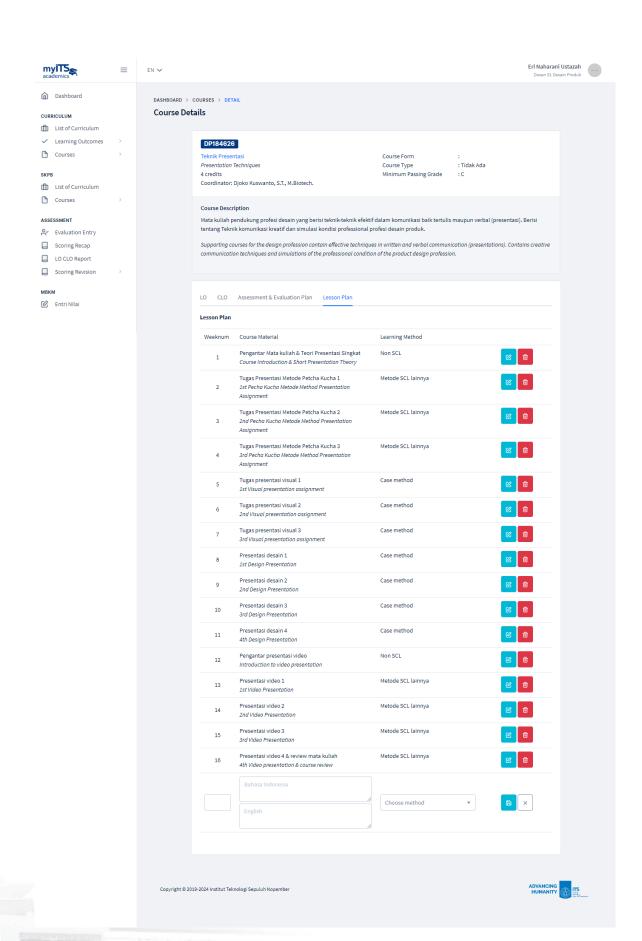
communication techniques and simulations of the professional condition of the product design profession.

LO CLO Assessment & Evaluation Plan Lesson Plan Assessment & Evaluation Plan Weight 1 Keaktifan dan sikap akademik Academic activity and attitude Kognitif - Tugas | Cognitive -Assignment 2 Teori Komunikasi Verbal & Visual Verbal & Visual Communication Theory Kognitif - Tugas | Cognitive -15% 5% 596 30% Assignment 3 Prinsip komunikasi dalam Principles of communication in 15% 20% presentat Studi Kasus | Case Method 4 Tugas-tugas Presentasi Presentation projects Studi Kasus | Case Method 5 Teknologi presentasi dan multimedia Presentation and multimedia technology Studi Kasus | Case Method TOTAL 10%

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# Technology Knowledge & Application

## **DESCRIPTION OF COURSE UNIT**

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



Course unit title	Nama Mata Kuliah
Course unit code	Kode
Type of course unit (compulsory, optional)	Compulsory/ Elective/ National
Level of course unit (according to EQF: first cycle Bachelor, second cycle Master)	First cycle Bachelor
Year of study when the course unit is delivered (if applicable)	1 <sup>st</sup> year (tahun)
Semester/trimester when the course unit is delivered	1 <sup>st</sup> semester (semester)
Number of ECTS credits allocated	ECTS Credits (konversi dari sks)
Name of lecturer(s)	Nama dosen
Learning outcomes of the course unit	СРМК
Mode of delivery (face-to-face, distance learning)	face-to-face
Prerequisites and co-requisites (if applicable)	
Course content	Penjabaran RPS
Recommended or required reading and other learning resources/tools	List Pustaka Utama
Planned learning activities and teaching methods	Discovery Learning; Project Based Learning; Team Based Learning (Metode Pembelajaran)
Language of instruction	Indonesia and English (Bahasa yang digunakan)
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation



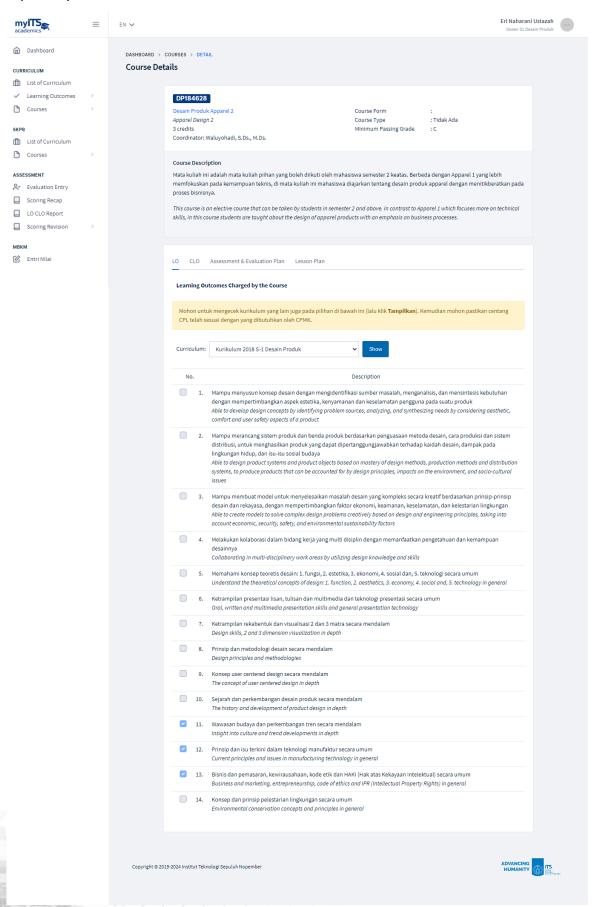
## Apparel Product Design 2 DESCRIPTION OF COURSE UNIT

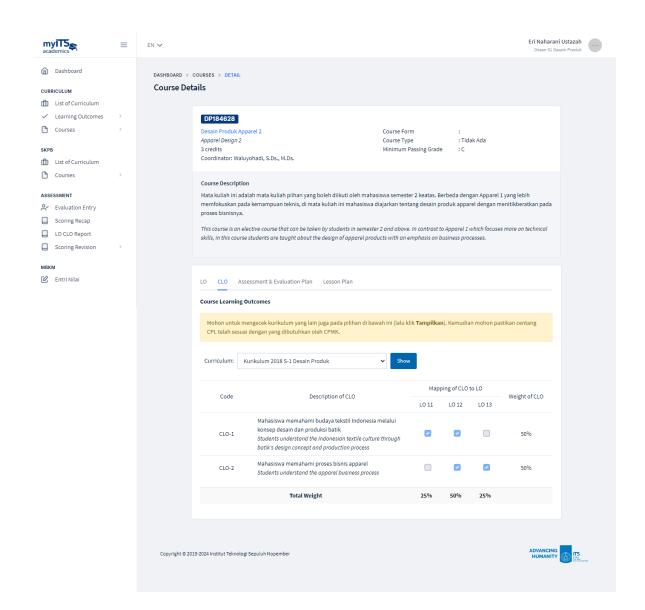
Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



Course unit title	Apparel Design 2			
Course unit code	DP1846328			
Type of course unit	Elective			
Level of course unit	First cycle Bachelor			
Year of study when the course unit is delivered	3 <sup>rd</sup> year			
Semester/trimester when the course unit is delivered	6 <sup>th</sup> semester			
Number of ECTS credits allocated	4,8 ECTS Credits			
Name of lecturer	Waluyohadi, S.Ds., M.Ds.			
Learning outcomes of the course unit  Mode of delivery	<ol> <li>student will be able to apply Design Thinking metho in fashion / apparel case</li> <li>student will be able to make: Design Brief, Moodboard dan Style guide</li> <li>student will be able to assembly product by using reverse engineering method</li> <li>student will be able to show their idea through: Thumbnail sketch, Alternatif Desain dan Desain Final</li> <li>student will be able to make Study/Form Model,</li> <li>student will be able to do iteration, development, dan presentation prototype</li> <li>student will be able to calculate Bill of Materials (BOM)</li> <li>students will be able to show their design work in an exhibiton with shop etiquette</li> </ol>			
Prerequisites and co-requisites				
Course content	This course is an elective course that can be taken by students in semester 2 and above. In contrast to Apparel 1 which focuses more on technical skills, in this course students are taught about the design of apparel products with an emphasis on business processes.  1. Introduksi: history, designer icon, design works 2. Basic theory: design thinking, concept, creative eksploration and study model, material, finishing			
	eksploration and study model, material, finishing 3. Design Brief: Image, inspiration, mood board, Style guide, Identify the Opportunity for a New Product			

	4. Research : Perform Product Research & reverse
	Engineering 5. Concept: Idea sketch, refine sketch, thumbnail sketch, design alternative dan final design 6. Iteration: Create 3D Model, Study/Form, Model prototype 7. Iteration: Development, Presentation prototype 8. Bill of Materials, Production, material & process, shop etiquette
Recommended or required reading and other learning resources/tools	<ul> <li>Burke, Sandra.2012.Fashion Designer-Concept to Collection. London: Burke publishing</li> <li>Charlotte &amp; Peter Fuell, Industrial Design A-Z, Taschen, 2000</li> <li>Charlotte &amp; Peter Fuell, Designing The 21st Century, Taschen, 2001</li> <li>Design Secrets: Products, Rocport Publisher. Inc., 2001</li> <li>Krome, Barrat, Logic and Design, George Godwin Ltd. 1980</li> <li>Larsen, Jack Lenor, Design Since 1945, Philadelphia Museum of Art, Rizzoli, New York, 1983</li> <li>Pearce, Peter, Experiments in Form, V.N, Reinhold Co. 1980</li> <li>William, Christoper, Origin of Form, Arch Book Co, New York, 1981</li> </ul>
Planned learning activities and teaching methods	Discovery Learning; Case Method
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation





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Course Form Course Type Minimum Passing Grade : Tidak Ada Coordinator: Waluyohadi, S.Ds., M.Ds.

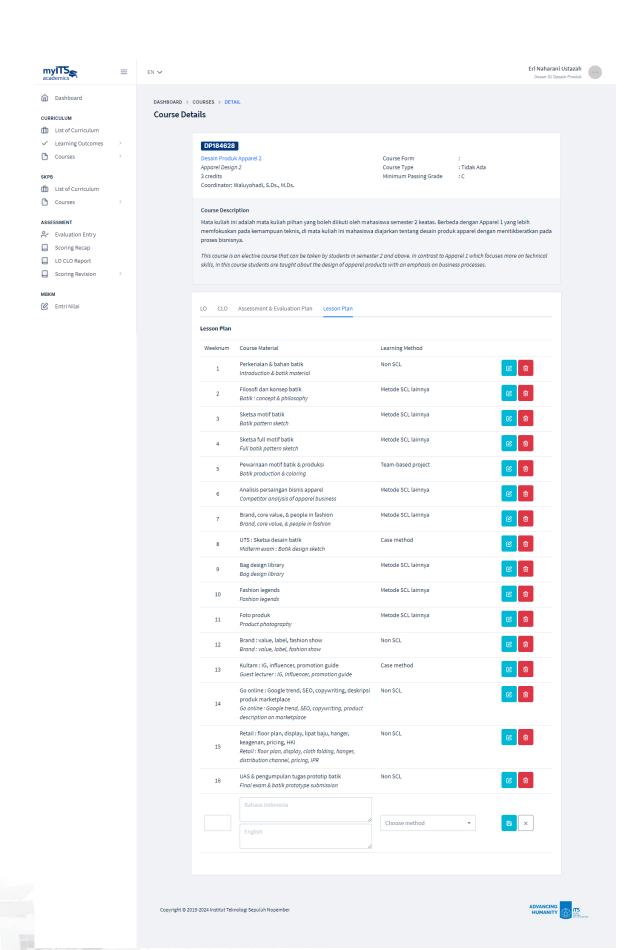
Mata kuliah ini adalah mata kuliah pihan yang boleh diikuti oleh mahasiswa semester 2 keatas. Berbeda dengan Apparel 1 yang lebih memfokuskan pada kemampuan teknis, di mata kuliah ini mahasiswa diajarkan tentang desain produk apparel dengan menitikberatkan pada proses bisnisnya.

This course is an elective course that can be taken by students in semester 2 and above. In contrast to Apparel 1 which focuses more on technical skills, in this course students are taught about the design of apparel products with an emphasis on business processes.

LO	CLO Assessment & Evaluation Plan	Lesson Plan		
Asses:	ment & Evaluation Plan			
No.	Evaluation Plan	CLO-1	CLO-2	Total Weight
1	Legenda fashion Fashion Legend Studi Kasus   Case Method	0%	15%	15%
2	Pustaka desain tas Bag design library Kognitif - Quiz   Cognitive - Quiz	0%	15%	15%
3	UTS : Sketsa desain batik Midterm exam : Batik design sketch Kognitif - UTS   Cognitive - Midterm Exam	20%	0%	20%
4	Prototip batik Batik prototype Hasil proyek   Team-based Project	30%	0%	30%
5	UAS : Proses bisnis apparel Final exam : Apparel business process Studi Kasus   Case Method	0%	20%	2096
	<b>TOTAL</b> <i>Target</i>	<b>50%</b> <i>50</i> %	<b>50%</b> 50%	<b>100%</b> 100%

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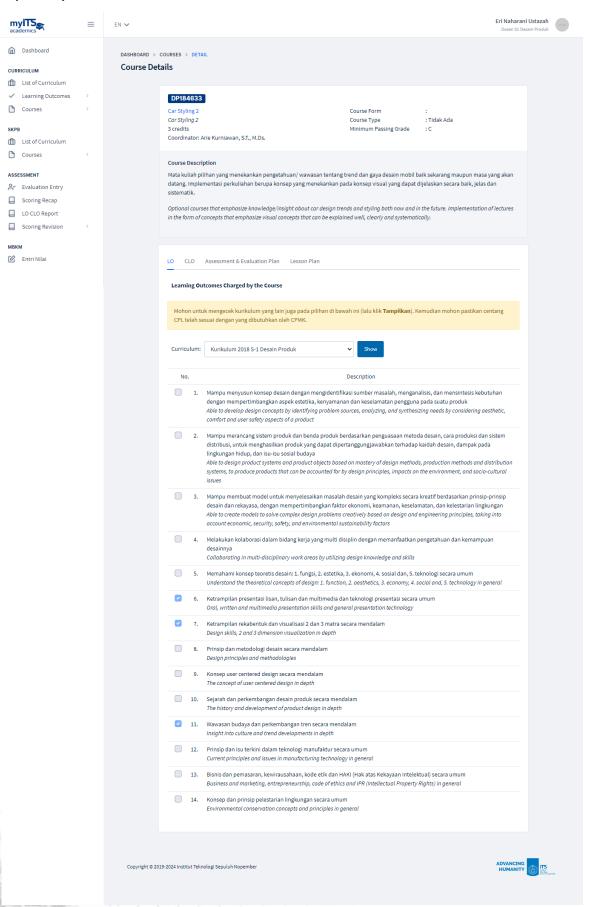
# Carstyling 2 DESCRIPTION OF COURSE UNIT

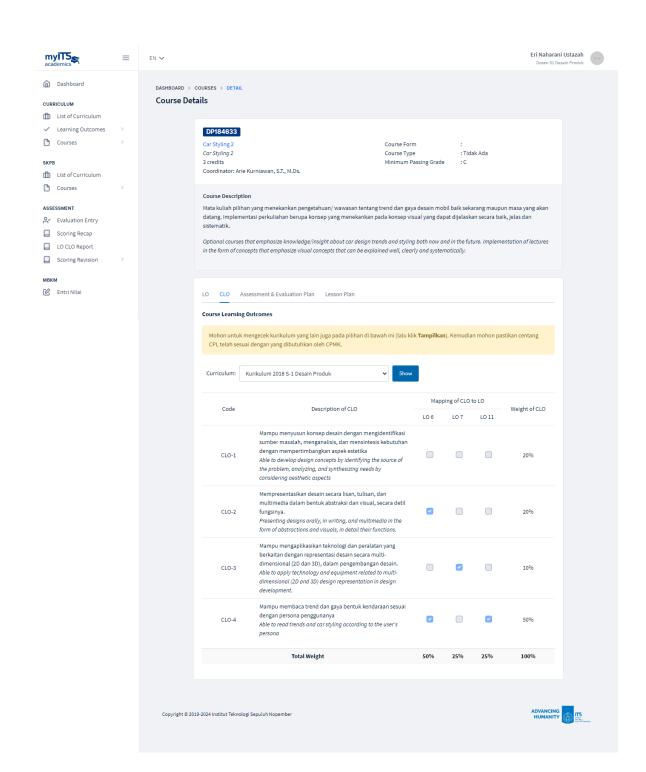
Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



Course unit title	Carstyling 2
Course unit code	DP184633
Type of course unit	Elective
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	3 <sup>rd</sup> year
Semester/trimester when the course unit is delivered	6 <sup>th</sup> semester
Number of ECTS credits allocated	4,8 ECTS Credits
Name of lecturer	Arie Kurniawan, S.T., M.Ds.
Learning outcomes of the course unit	<ol> <li>Able to develop design concepts by identifying the source of the problem, analyzing, and synthesizing needs by considering aesthetic aspects</li> <li>Presenting designs orally, in writing, and multimedia in the form of abstractions and visuals, in detail their functions.</li> <li>Able to apply technology and equipment related to multi-dimensional (2D and 3D) design representation in design development.</li> <li>Able to read trends and car styling according to the user's persona</li> </ol>
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	Optional courses that emphasize knowledge/insight about car design trends and styling both now and in the future. Implementation of lectures in the form of concepts that emphasize visual concepts that can be explained well, clearly and systematically.  1) Design insights, designers, and design works that are current trends in automobiles 2) Visual theory of automotive design
	3) Platform analysis 4) Brand identity in the appearance of automobiles 5) Consumer Behavior, persona, and designer impression 6) Image Board and Semantics analysis 7) 3D Modeling and Rendering 8) Clay Modeling 9) Exhibition and Presentation Techniques

Recommended or required reading and other learning resources/tools	<ul> <li>Bou, Louis, We Are Indie Toys: Make Your Own Resin Characters, 2014</li> <li>Budnitz, Paul, I Am Plastic, Too: The Next Generation of Designer Toys, 2010</li> <li>Hakim, Primaditya, Development of Designer-toy by Utilizing WoodWaste, 2013</li> </ul>
Planned learning activities and teaching methods	Team-based project; Case Method
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation





#### Course Details

DASHBOARD > COURSES > DETAIL

Course Deta

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Courses

List of Curriculum

Courses

n Dashboard

CURRICULUM

List of Curriculum

✓ Learning Outcomes

ASSESSMENT

A Evaluation Entry

Scoring Recap

LO CLO Report

Scoring Revision

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Entri Nilai

 DP184633

 Car Styling 2
 Course Form
 :

 Car Styling 2
 Course Type
 : Tidak Ada

 3 credits
 Minimum Passing Grade
 : C

 Coordinator: Arie Kurniawan, S.T., M.Ds.
 ...
 ...

Course Description

Mata kuliah pilihan yang menekankan pengetahuan/ wawasan tentang trend dan gaya desain mobil baik sekarang maupun masa yang akan datang. Implementasi perkuliahan berupa konsep yang menekankan pada konsep visual yang dapat dijelaskan secara baik, jelas dan sistematik.

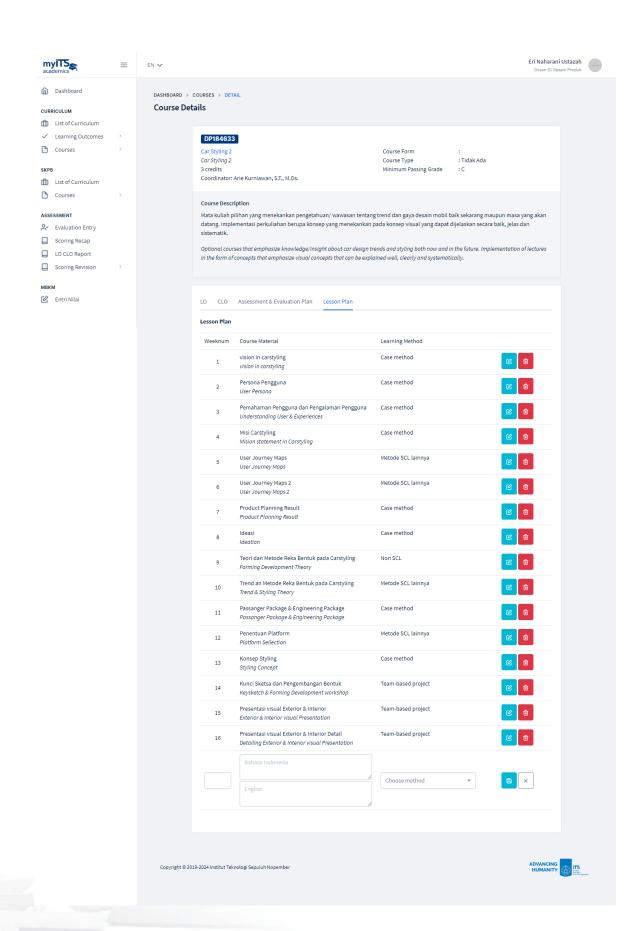
Optional courses that emphasize knowledge/insight about car design trends and styling both now and in the future. Implementation of lectures in the form of concepts that emphasize visual concepts that can be explained well, clearly and systematically.

LO	CLO Assessment & Evaluation Plan	Lesson Plan					
Asses	ssessment & Evaluation Plan						
No.	. Evaluation Plan	CLO-1	CLO-2	CLO-3	CLO-4	Total Weight	
1	VIsi dan Misi Project Carstyling 2 Vision & Mission Carstyling 2 Studi Kasus   Case Method	10%	096	0%	096	10%	
2	User Journey maps; Persona; Imageboard User Journey maps; Persona; Imageboard Studi Kasus   Case Method	096	096	0%	10%	10%	
3	Keysketch & Forming Development Keysketch & Forming Development Kognitif - Tugas   Cognitive - Assignment	10%	5%	0%	10%	25%	
4	Presentasi visual Interior & Eksterior Visual Presentation Interior & Eksterior Hasil proyek   Team-based Project	0%	10%	5%	20%	35%	
5	Presentasi Detailing Carstyling 2 Detailing Presentation Carstyling 2 Kognitif - UAS   Cognitive - Final Exam	0%	5%	5%	10%	20%	
	TOTAL Target	<b>20%</b> 20%	<b>20%</b> 20%	<b>10%</b> 10%	<b>50%</b> 50%	<b>100%</b> 10096	

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Eri Naharani Ustazah

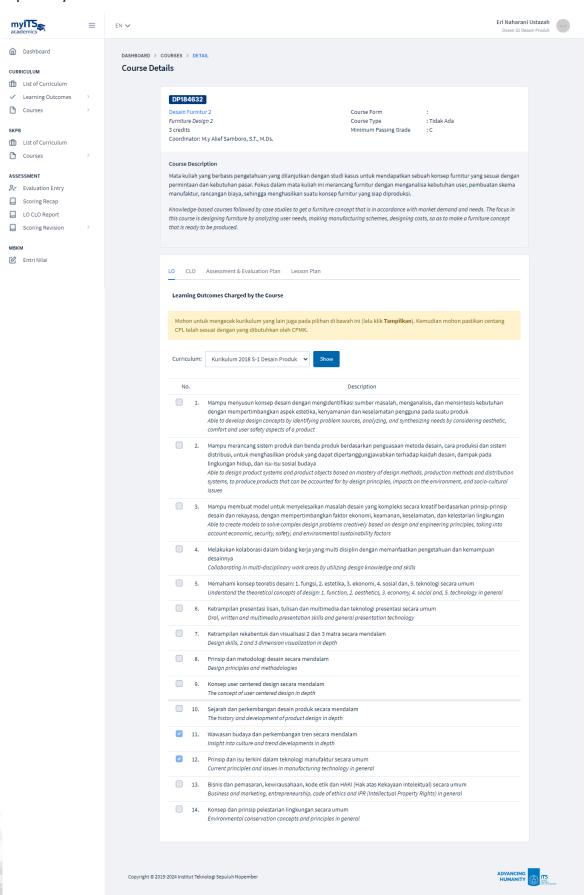


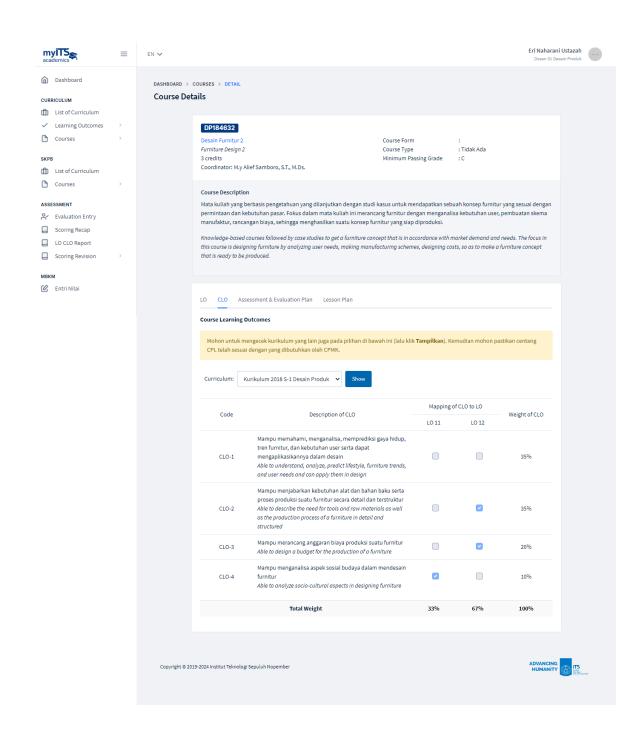


## Furniture Design 2 DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023

Course unit title	Furnitur Design 2
Course unit code	DP184632
Type of course unit	Elective
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	3 <sup>rd</sup> year
Semester/trimester when the course unit is delivered	6 <sup>th</sup> semester
Number of ECTS credits allocated	4,8 ECTS Credits
Name of lecturer	M.y Alief Samboro, S.T., M.Ds.
Learning outcomes of the course unit	<ol> <li>Able to understand, analyze, predict lifestyle, furniture trends, and user needs and can apply them in design</li> <li>Able to describe the need for tools and raw materials as well as the production process of a furniture in detail and structured</li> <li>Able to design a budget for the production of a furniture</li> <li>Able to analyze socio-cultural aspects in designing furniture</li> </ol>
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	Knowledge-based courses followed by case studies to get a furniture concept that is in accordance with market demand and needs. The focus in this course is designing furniture by analyzing user needs, making manufacturing schemes, designing costs, to make a furniture concept that is ready to be produced.
Recommended or required reading and other learning resources/tools	
Planned learning activities and teaching methods	Case Method; Team Based Learning
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation





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CURRICULUM

List of Curriculum ✓ Learning Outcomes >

Courses

List of Curriculum

Courses

ASSESSMENT

A Evaluation Entry

Scoring Recap LO CLO Report

Scoring Revision

🕜 Entri Nilai

DASHBOARD > COURSES > DETAIL

#### Course Details

DP184632

Furniture Design 2 3 credits

Course Form Course Type Minimum Passing Grade : Tidak Ada

Coordinator: M.y Alief Samboro, S.T., M.Ds.

#### Course Description

Mata kuliah yang berbasis pengetahuan yang dilanjutkan dengan studi kasus untuk mendapatkan sebuah konsep furnitur yang sesuai dengan permintaan dan kebutuhan pasar. Fokus dalam mata kuliah ini merancang furnitur dengan menganalisa kebutuhan user, pembuatan skema manufaktur, rancangan biaya, sehingga menghasilkan suatu konsep furnitur yang siap diproduksi.

Knowledge-based courses followed by case studies to get a furniture concept that is in accordance with market demand and needs. The focus in this course is designing furniture by analyzing user needs, making manufacturing schemes, designing costs, so as to make a furniture concept that is ready to be produced.

LO	CLO	Assessment & Evaluation Plan	Lesson Plan					
Asses	ssessment & Evaluation Plan							
No.	Evalu	uation Plan	CLO-1	CLO-2	CLO-3	CLO-4	Total Weight	
1	Mark	utuhan Market + Eksisting set Needs + Existing i Kasus   Case Method	15%	0%	096	5%	20%	
2	Mate	rial dan Manufacturing rials and Manufacturing   proyek   Team-based Project	10%	10%	10%	0%	30%	
3	Struc	ktur dan Gambar Kerja kture and Working Drawing   proyek   Team-based Project	0%	15%	10%	0%	25%	
4	Scale	el Terskala ed Model   proyek   Team-based Project	5%	10%	096	0%	15%	
5	Exhib	eran dan Presentasi oitions and Presentations nitif - UAS   Cognitive - Final n	5%	0%	096	5%	10%	
		<b>TOTAL</b> Target	<b>35%</b> 35%	<b>35%</b> 35%	<b>20%</b> 20%	<b>10%</b> 10%	<b>100%</b> 100%	



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LO CLO Assessment & Evaluation Plan Lesson Plan Lesson Plan Weeknum Course Material Learning Method Introduksi, silabus, kontrak kuliah Introduction, syllabus, lecture contract Non SCL Penentuan tema furnitur set (Kursi dan meja) Team-based project Determination of the theme of furniture sets (chairs and tables) Survey user untuk menemukan kebutuhan user Case method User survey to find user needs Analisa pasar berdasar dari eksisting produk yang Case method ada di pasar Market analysis based on existing products in the market Konstruksi dan manufakturing pada furnitur Metode SCL lainnya berbahan kayu Construction and manufacturing of wooden furniture Konstruksi dan manufakturing pada furnitur Metode SCL lainnya berbahan non-kayu Construction and manufacturing of non-wood Presentasi moodboard dan konsep atas kebutuhan Team-based project pasar Moodboard presentation and concept on market needs Detail furnitur terkait asesori, perangkat konstruksi, Metode SCL lainnya dan finishing furnitur Furniture details related to accessories, construction equipment, and furniture finishing Pembuatan alternatif desain Team-based project Making alternative designs Team-based project Final design determination Detail final desain terkait dengan material dan Case method potensi manufaktur 11 Final design details related to materials and manufacturing potential Skema manufaktur Metode SCL lainnya 12 Manufacturing scheme Pembuatan skema manufaktur dalam project Creating a manufacturing scheme in the project Gambar kerja detail dengan disertai assembly Team-based project 14 Detailed working drawings accompanied by assembly Pembuatan mockup atau studi model Team-based project 15 Mockup creation or model study Team-based project Presentations and exhibitions Choose method▼

this course is designing furniture by analyzing user needs, making manufacturing schemes, designing costs, so as to make a furniture concept that is ready to be produced.

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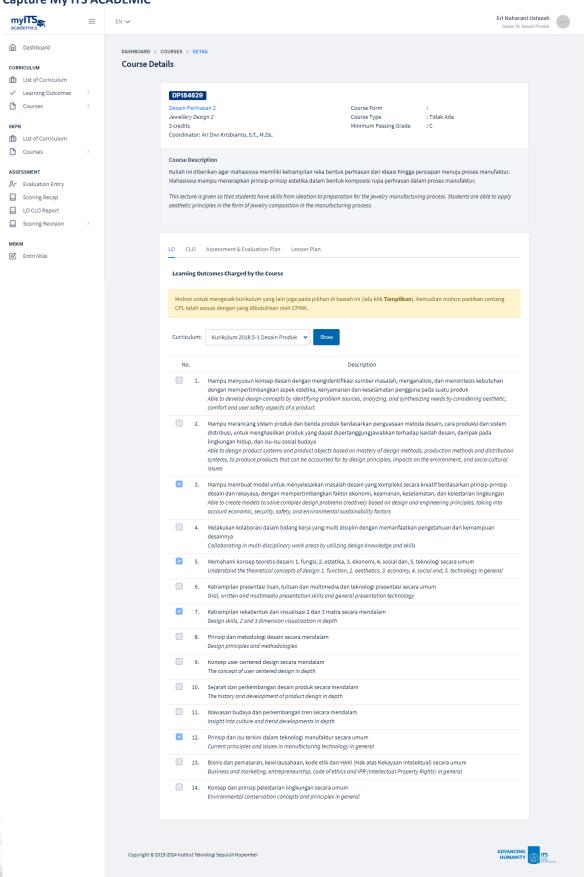


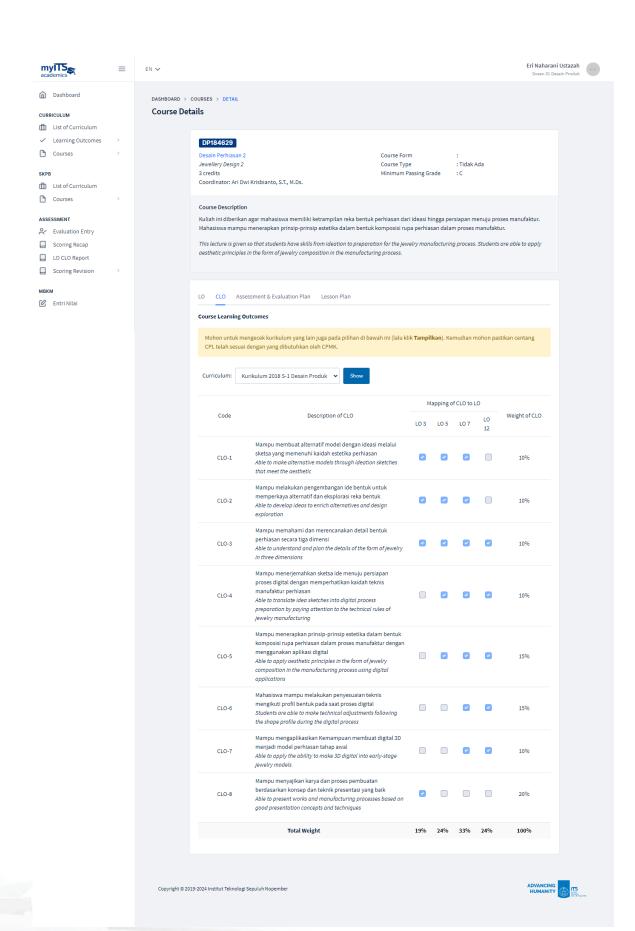
## Jewelry Design 2 DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023

Course unit title	Jewelry Design 2
Course unit code	DP1846329
Type of course unit	Elective
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	3 <sup>rd</sup> year
Semester/trimester when the course unit is delivered	6 <sup>th</sup> semester
Number of ECTS credits allocated	4,8 ECTS Credits
Name of lecturer	Ari Dwi Krisbianto, S.T., M.Ds.
	<ul> <li>Students capable to design jewelry with unique and innovative shape</li> <li>Students capable to comply arrangement and technical restriction due jewelry form cases</li> <li>Students capable to operate common program application by jewelry industry</li> <li>Students know the workflow and production process in industry</li> <li>Students capable to create jewelry come near to jewelry industry</li> </ul>
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	This lecture is given so that students have skills from ideation to preparation for the jewelry manufacturing process. Students are able to apply aesthetic principles in the form of jewelry composition in the manufacturing process.  1. Jewelry shape ideation 2. Jewelry idea usage in real scale and standard elements and components application
	3. Digital modeling and technical simulation 4. Jewelry design application program (Rhinoceros, RhinoGold, Matrix etc) 5. Assembling 6. Finishing
Recommended or required reading and other learning resources/tools	<ul> <li>Donohue, N. (2014). The Jewelry Maker's Design Book: An Alchemy of Objects.</li> <li>Worsley, H. (2014). 100 Ideas that Changed Fashion.</li> </ul>

	Lauren King Publishing
Planned learning activities and teaching methods	Case Method; Team Based Learning
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation





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CURRICULUM

List of Curriculum ✓ Learning Outcomes

Courses

ff List of Curriculum

ASSESSMENT

Scoring Recap ☐ LO CLO Report

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DASHBOARD > COURSES > DETAIL

**Course Details** 

DP184629

Jewellery Design 2 Coordinator: Ari Dwi Krisbianto, S.T., M.Ds.

Course Type Minimum Passing Grade

Course Form

: Tidak Ada

Course Description

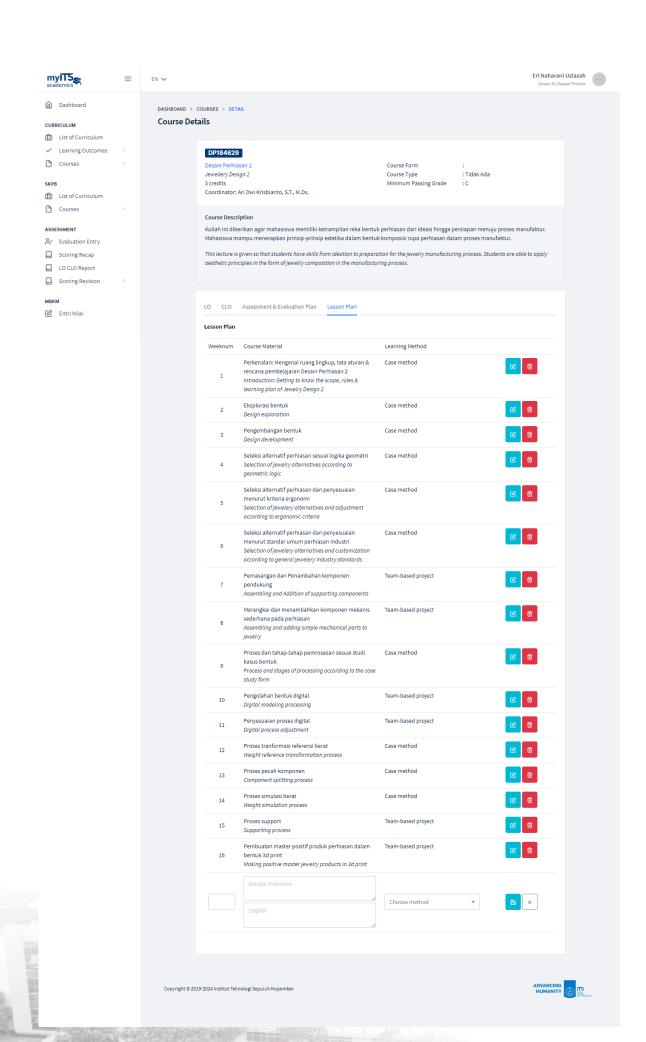
Kuliah ini diberikan agar mahasiswa memiliki ketrampilan reka bentuk perhiasan dari ideasi hingga persiapan menuju proses manufaktur. Mahasis wa mampu menerapkan prinsip-prinsip estetika dalam bentuk komposisi rupa perhiasan dalam proses manufaktur.

 $This \ lecture \ is \ given \ so \ that \ students \ have \ skills \ from \ ideation \ to \ preparation \ for \ the \ jewelry \ manufacturing \ process. \ Students \ are \ able to \ apply \ process.$ aesthetic principles in the form of jewelry composition in the manufacturing process.

LO CLO Assessment & Evaluation Plan Lesson Plan Assessment & Evaluation Plan CLO- CLO- CLO- CLO- CLO- CLO- CLO-1 Brainstorming sketsa ide Brainstorming Ideation sketches Studi Kasus | Case Method 10% 0% 10% 2 Pengembangan sketsa ide Idea sketch development Kognitif - Tugas | Cognitive -Assignment Vector template 3D Hasil provek | Team-based Project 4 Sketsa detail perhiasan untuk pemrofilan 1096 Detail sketch for 3D profiling Hasil proyek | Team-based Project 5 Pemrofilan 3 dimensi 3D profiling Hasil proyek | Team-based Project 6 Profil 3D akhr Hasil proyek | Team-based Project 7 Support model perhiasan Hasil proyek | Team-based Project Booklet portfolio dan Produk portfolio booklet and iewelerv product . Hasil proyek | Team-based Project TOTAL 10% 10% 15% 15% 10% 20% 100%

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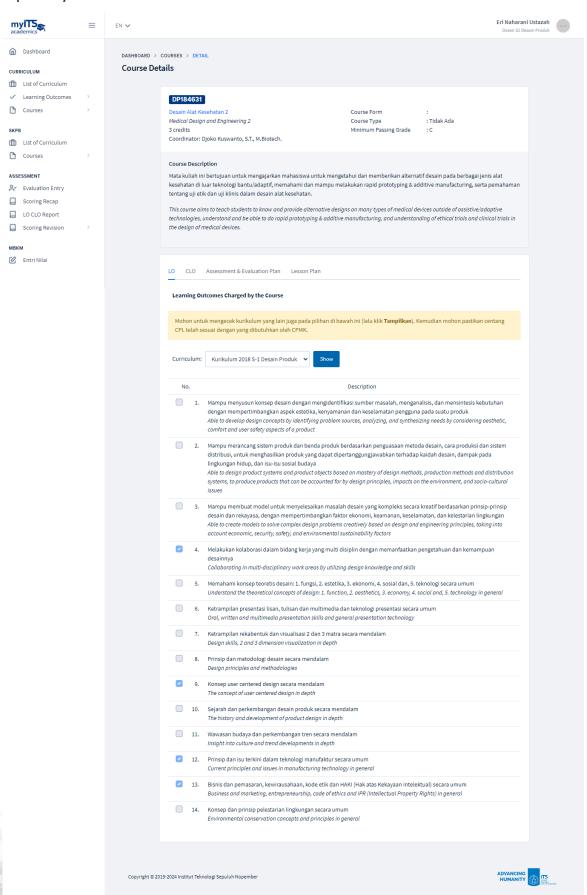
## Medical Device 2 DESCRIPTION OF COURSE UNIT

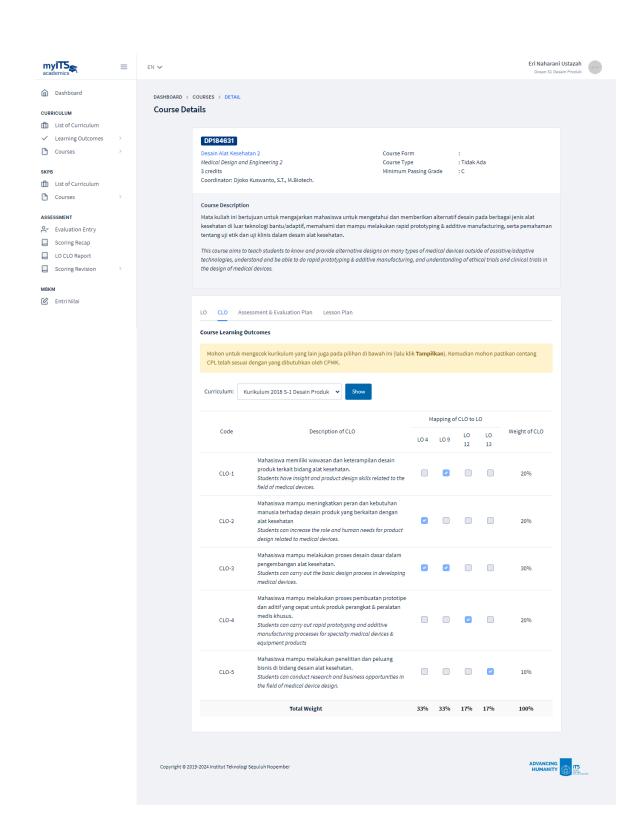
Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



Course unit title	Medical Device Design 2
Course unit code	DP184631
Type of course unit	Elective
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	3 <sup>rd</sup> year
Semester/trimester when the course unit is delivered	6 <sup>st</sup> semester
Number of ECTS credits allocated	4,8 ECTS Credits
Name of lecturer	Djoko Kuswanto, S.T., M.Biotech.
	<ol> <li>Students have insight and product design skills related to the field of medical devices.</li> <li>Students can increase the role and human needs for product design related to medical devices.</li> <li>Students can carry out the basic design process in developing medical devices.</li> <li>Students can carry out rapid prototyping and additive manufacturing processes for specialty medical devices &amp; equipment products</li> <li>Students can conduct research and business opportunities in the field of medical device design.</li> </ol>
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	This course aims to teach students to know and provide alternative designs on many types of medical devices outside of assistive/adaptive technologies, understand and be able to do rapid prototyping & additive manufacturing, and understanding of ethical trials and clinical trials in the design of medical devices.
Recommended or required reading and other learning resources/tools	
Planned learning activities and teaching methods	Team Based Learning
Language of instruction	Indonesia

Assessment methods and	Assignment, Project, Midterm Evaluation and Final
criteria	Evaluation





n Dashboard

CURRICULUM

List of Curriculum ✓ Learning Outcomes

Courses

List of Curriculum

ASSESSMENT

A Evaluation Entry

Scoring Recap LO CLO Report

мвкм

🖒 Entri Nilai

DASHBOARD > COURSES > DETAIL

### Course Details

DP184631

Medical Design and Engineering 2

Coordinator: Dioko Kuswanto, S.T., M.Biotech,

Course Type Minimum Passing Grade

: Tidak Ada

Course Form

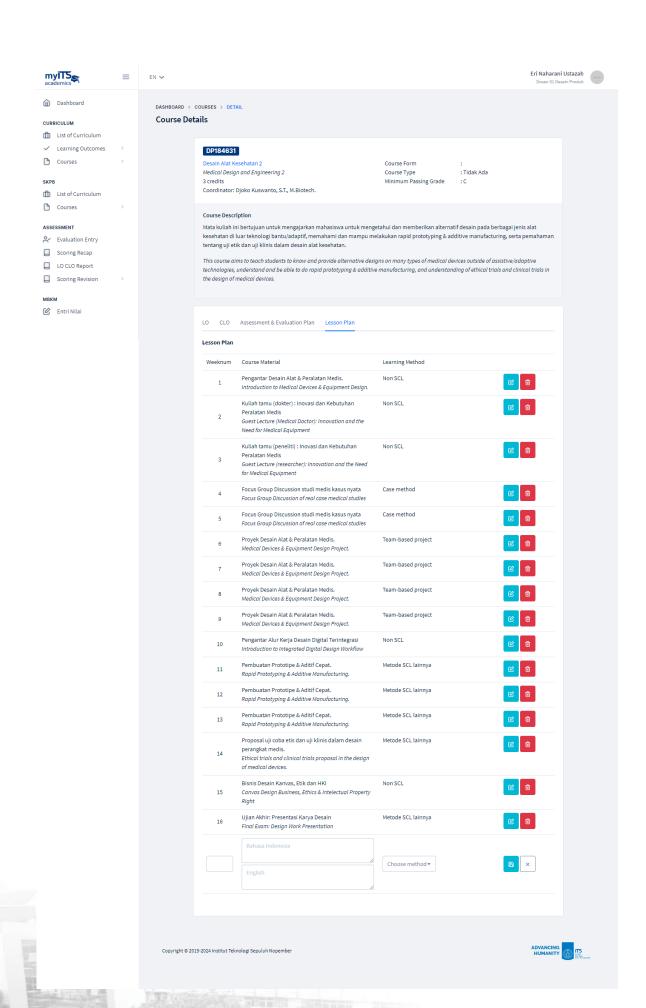
Mata kuliah ini bertujuan untuk mengajarkan mahasiswa untuk mengetahui dan memberikan alternatif desain pada berbagai jenis alat kesehatan di luar teknologi bantu/adaptif, memahami dan mampu melakukan rapid prototyping & additive manufacturing, serta pemahaman tentang uji etik dan uji klinis dalam desain alat kesehatan.

This course aims to teach students to know and provide alternative designs on many types of medical devices outside of assistive/adaptive technologies, understand and be able to do rapid prototyping & additive manufacturing, and understanding of ethical trials and clinical trials in the design of medical devices.

LO	CLO	Assessment & Evaluation Plan	Lesson P	lan							
Assessment & Evaluation Plan											
No.	Evalu	ation Plan	CLO-1	CLO-2	CLO-3	CLO-4	CLO-5	Total Weight			
1	Keaktifan dan sikap akademik Academic activity and attitude Kognitif - Tugas   Cognitive - Assignment		0%	0%	5%	0%	0%	5%			
2	Ident. Urger	ifikasi Masalah dan Urgensi ification of Problems and ncy Kasus   Case Method	10%	10%	10%	0%	0%	30%			
3	Desig	es Pengembangan Desain In Development Process Kasus   Case Method	10%	10%	15%	0%	0%	35%			
4	Produ	otip produk uct Prototype proyek   Team-based Project	0%	0%	0%	20%	0%	20%			
5	HKI Canvi and I	itif - UAS   Cognitive - Final	0%	0%	0%	0%	10%	10%			

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# Desainer toy 2 DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023

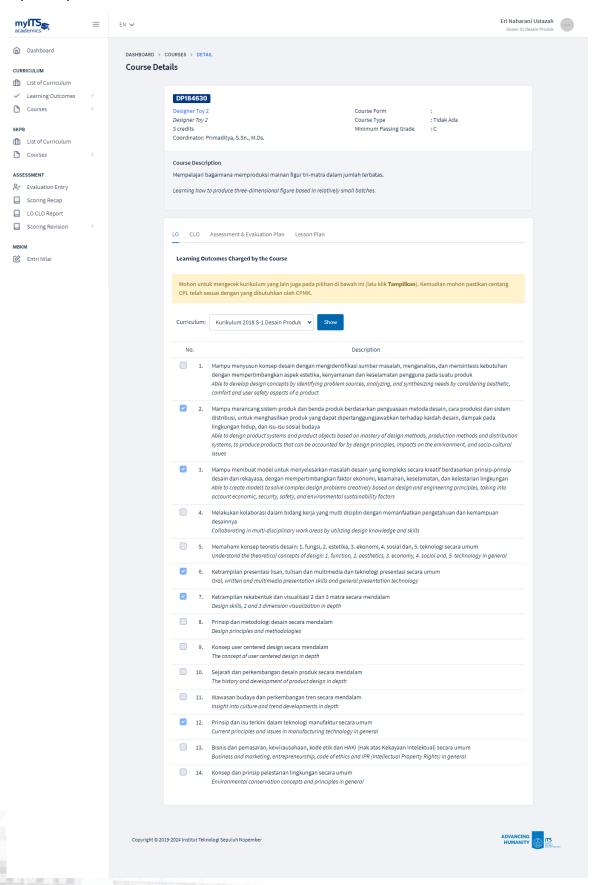


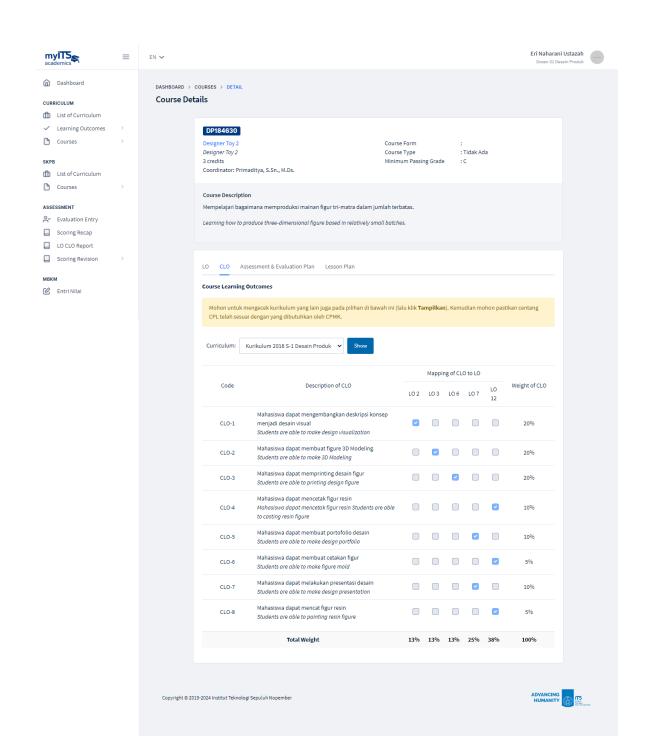
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

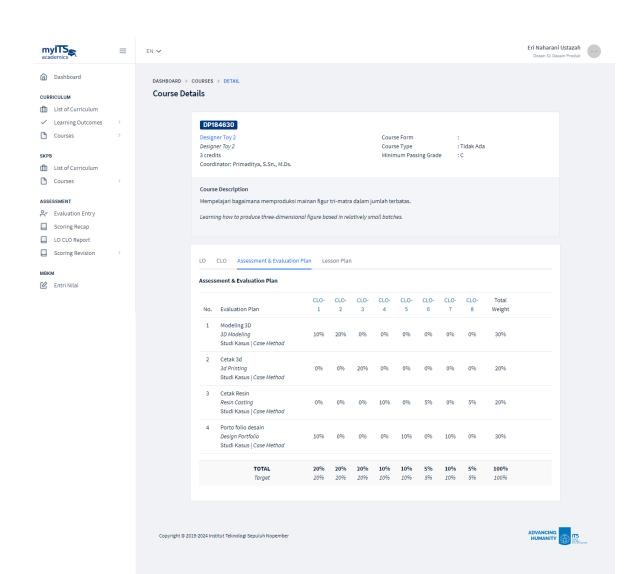
Course unit title	Toy Design 2
Course unit code	DP184630
Type of course unit	Elective
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	3 <sup>rd</sup> year
Semester/trimester when the course unit is delivered	6 <sup>th</sup> semester
Number of ECTS credits allocated	4,8 ECTS Credits
Name of lecturer	Primaditya, S.Sn., M.Ds.
Learning outcomes of the course unit	Students will be able to produce their designer toy in limited quantities and present it in a special exhibition.
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	This course focuses on the study of producing limited edition tri-matra figurines.
	<ul> <li>Finalization of design in tri-matra presentation images.</li> <li>Design of accessories/supplements.</li> <li>Design of parts/components.</li> <li>Production of the tri-matra model.</li> </ul>
	- Packaging design Portfolio Presentation & Exhibition.
Recommended or required reading and other learning resources/tools	<ul> <li>Bou, Louis, We Are Indie Toys: Make Your Own Resin Characters, 2014</li> <li>Budnitz, Paul, I Am Plastic, Too: The Next Generation of Designer Toys, 2010</li> <li>Hakim, Primaditya, Development of Designer-toy by Utilizing WoodWaste, 2013</li> </ul>
Planned learning activities and teaching methods	Case Method
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

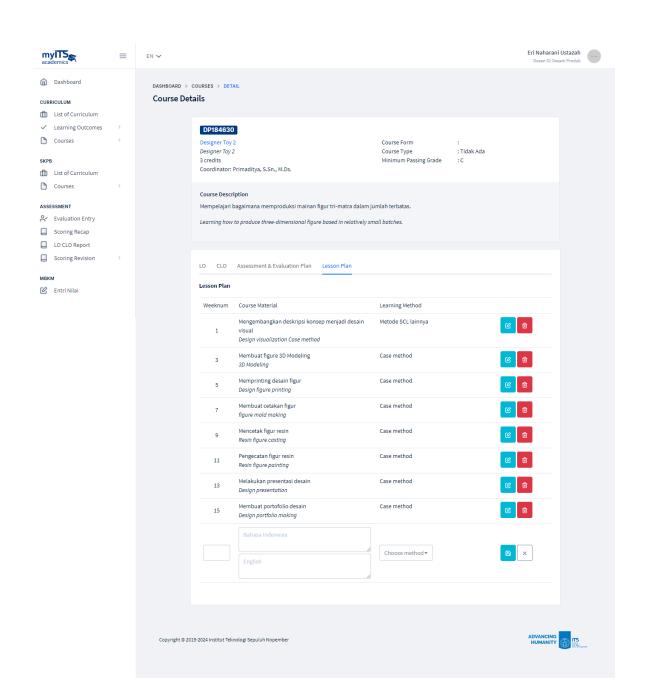
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## 7th SEMESTER

Bachelor of Industrial Design (BOID)





# Product Design 4 DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



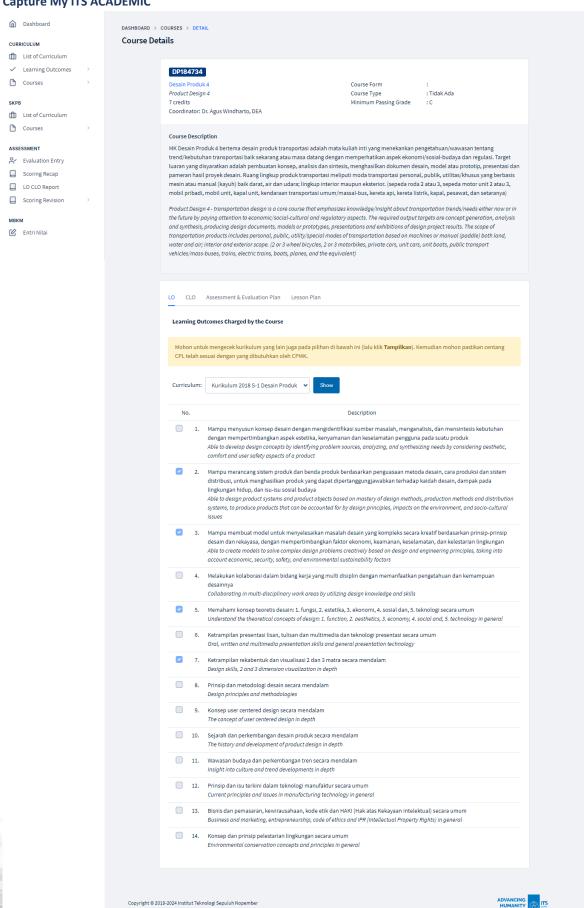
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

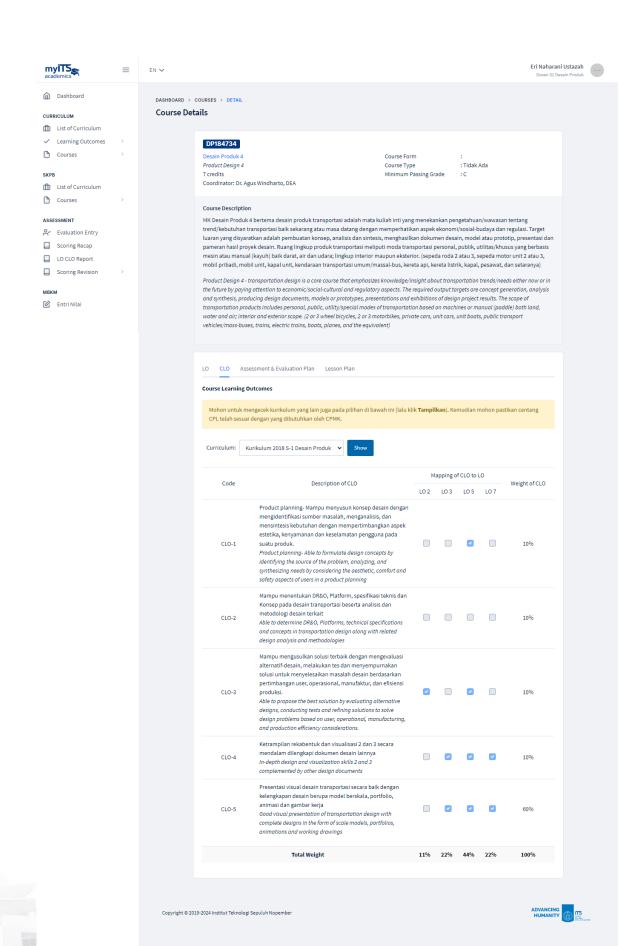
Course unit title	Product Design 4
Course unit code	DP184734
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	4 <sup>th</sup> year
Semester/trimester when the course unit is delivered	7 <sup>th</sup> semester
Number of ECTS credits allocated	11,2 ECTS Credits
Name of lecturer	Dr. Agus Windharto, DEA
Learning outcomes of the course unit	<ol> <li>Product planning- Able to formulate design concepts by identifying the source of the problem, analyzing, and synthesizing needs by considering the aesthetic, comfort and safety aspects of users in a product planning</li> <li>Able to determine DR&amp;O, Platforms, technical specifications and concepts in transportation design along with related design analysis and methodologies</li> <li>Able to propose the best solution by evaluating alternative designs, conducting tests and refining solutions to solve design problems based on user, operational, manufacturing, and production efficiency considerations.</li> <li>In-depth design and visualization skills 2 and 3 complemented by other design documents</li> <li>Good visual presentation of transportation design with complete designs in the form of scale models, portfolios, animations and working drawings</li> </ol>
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	Product Design 4 - transportation design is a core course that emphasizes knowledge/insight about transportation trends/needs either now or in the future by paying attention to economic/social-cultural and regulatory aspects. The required output targets are concept generation, analysis and synthesis, producing design documents, models or prototypes, presentations and exhibitions of design project results. The scope of transportation products includes personal, public, utility/special modes of transportation based on

	machines or manual (paddle) both land, water and air;
	interior and exterior scope. (2 or 3 wheel bicycles, 2 or 3 motorbikes, private cars, unit cars, unit boats, public transport vehicles/mass-buses, trains, electric trains, boats, planes, and the equivalent)
	<ol> <li>Course contract for design and title proposal.</li> <li>Brainstorming design themes/ideas, including; problems, objectives, targeting, design concept, idea sketches, schedule.</li> <li>Initial data processing; survey data, existing products, previous designs, and competitor products.</li> <li>Brief idea and needs; needs (MSCA, psychographics), ideation (mind map, image board, objective tree).</li> <li>Preliminary design; exploration of idea sketches and alternative designs.</li> <li>Analysis of activities, components, dimensions.</li> <li>Analysis of design results; configuration (engineering package, lopas), ergonomics (posture, vision, accessibility), shape (normative, analogy/character), cross-section, color, technical aspects.</li> <li>Design development; material &amp; structure, joint &amp; mechanism, detail &amp; part design, assembly &amp; subassembly, color scheme &amp; brand identity.</li> <li>Design program/criteria.</li> <li>Product documentation; shop drawing, 3D model &amp; rendering, final report</li> </ol>
	rendering, final report. 12) Model/prototype.
Recommended or required reading and other learning resources/tools	<ul> <li>Clifford Fiore (2003), "Lean strategis for product development", ASQ Quality Press, Milwauke, Wincosin.</li> <li>Leon G. Schiffman, Leslie Lazar Kanuk (2007), "Consumer Behaviour", Ninth Edition, Prentice Hall, Pearson Education, Inc, New Jersey.</li> <li>Nikolaos Gkikas (2013), "Automotive Ergonomics-Driver Vehicle Interaction", CRC Press, Taylor &amp; Francis Group, 6000 Broken Sound Parkway, NW Suite 300, Boca Raton, London.</li> <li>Rhenald Kasali (2003), "Membidik Pasar Indonesia; Segmentasi, Targeting dan Positioning", PT. Gramedia Pustaka Utama, Jakarta.</li> <li>Stuart Macey, Geoff Wardley (2008), "H Point-The Fundamental of Car Design &amp; Packaging", Design Studio Press, Higuera Street, Culver City, California</li> </ul>
Planned learning activities and teaching methods	Case Method; Team Based Learning
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

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#### ASSESSMENT

A Evaluation Entry

Scoring Recap ☐ LO CLO Report

🖒 Entri Nilai

DASHBOARD > COURSES > DETAIL

#### **Course Details**

#### DP184734

Course Form Course Type Minimum Passing Grade Product Design 4 : Tidak Ada Coordinator: Dr. Agus Windharto, DEA

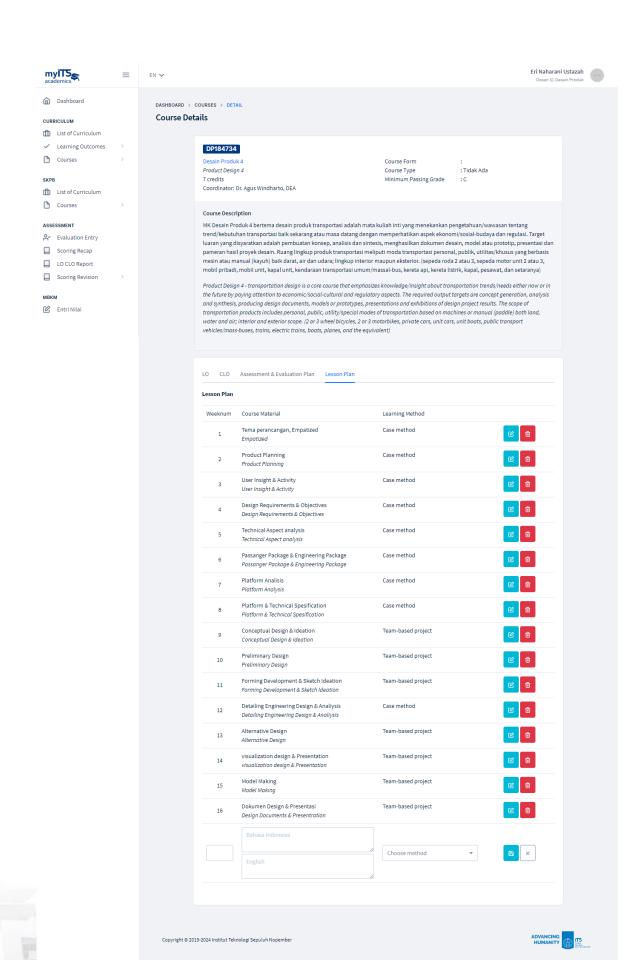
#### Course Description

MK Desain Produk 4 bertema desain produk transportasi adalah mata kuliah inti yang menekankan pengetahuan/wawasan tentang Mk Desain Product A preterma desain product transportasi adatan mata kuluain nti yang mehekankan pengefatulan/wawasan tertak trend/kebutuhan transportasi balis keskarang atau masa datang dengan memperhatikan aspek ekonomi/sosila-budaya dan regulasi. Target luaran yang disyaratkan adalah pembuatan konsep, analisis dan sintesis, menghasilkan dokumen desain, model atau prototip, presentasi dan pameran hasil proyek desain. Ruang lingkup produk transportasi meliputi moda transportasi personal, publik, utilitas/khusus yang berbasis mesin atau manual (kayuh) baik darat, air dan udara; lingkup interior maupun eksterior. (sepeda roda 2 atau 3, sepandor unit 2 atau 3, mobil pribadi, mobil unit, kapal unit, kendaraan transportasi umum/massal-bus, kereta api, kereta listrik, kapal, pesawat, dan setaranya)

Product Design 4 - transportation design is a core course that emphasizes knowledge/insight about transportation trends/needs either now or in Product besign 4 - transportation design is a core course unit emphasizes involvedge insign about transportation the ends need seller how or in the future by paying attention to economic/social-cultural and regulatory aspects. The required output targets are concept generation, analysis and synthesis, producing design documents, models or prototypes, presentations and exhibitions of design project results. The scope of transportation products includes personal, public, utility/special modes of transportation based on machines or manual (paddle) both land, water and air, interior and exterior scope. (2 or 3 wheel bicycles, 2 or 3 motorbikes, private cars, unit cars, unit boats, public transport vehicles/mass-buses, trains, electric trains, boats, planes, and the equivalent)

sess	sment & Evaluation Plan						
No.	Evaluation Plan	CLO-1	CLO-2	CLO-3	CLO-4	CLO-5	Total Weight
1	Product Planning Product Planning Studi Kasus   Case Method	5%	0%	0%	0%	0%	596
2	DR&O DR&O Studi Kasus   Case Method	0%	5%	0%	0%	0%	5%
3	Platform Analisis Platform Analysis Hasil proyek   Team-based Project	0%	0%	3%	1%	0%	496
4	Portfolio & Presentasi Desain Portfolio & Presentation Design Hasil proyek   Team-based Project	5%	5%	7%	5%	10%	32%
5	Sketsa dan Preliminary Design Sketch dan Preliminary Design Hasil proyek   Team-based Project	0%	0%	0%	1%	5%	6%
6	3d visual & Animation 3d visual & Animation Hasil proyek   Team-based Project	0%	0%	0%	1%	10%	11%
7	Gambar teknik <i>Technical Drawing</i> Hasil proyek   <i>Team-based Project</i>	0%	0%	0%	1%	10%	11%
8	Model Berskala/ 3d model Model Making Hasil proyek   Team-based Project	0%	0%	0%	0%	10%	10%
9	Laporan & Evaluasi Desain Design Report & Evaluation Hasil proyek   Team-based Project	0%	0%	0%	1%	15%	16%
	TOTAL	10%	10%	10%	10%	60%	100%





Gedung Desain Produk ITS Jl. Despro No.1 Kampus ITS Sukolilo Surabaya. 60111 Hotline Call official: +62315931147 email: despro@its.ac.id



# Design Research DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



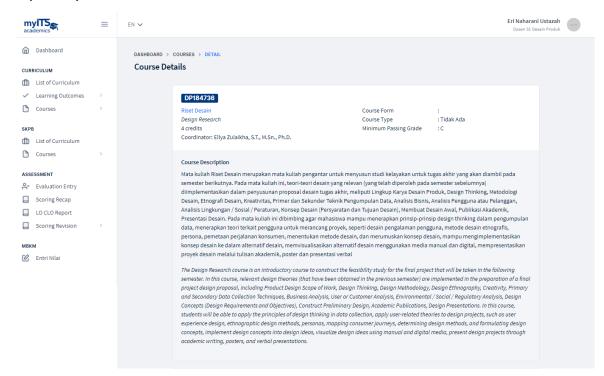
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

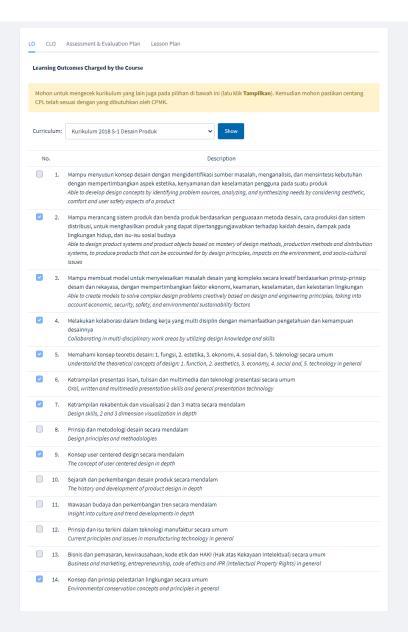
Course unit title	Design Research
Course unit code	DP184736
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	4 <sup>th</sup> year
Semester/trimester when the course unit is delivered	7 <sup>th</sup> semester
Number of ECTS credits allocated	6,4 ECTS Credits
Name of lecturer	Ellya Zulaikha, S.T., M.Sn., Ph.D.
	1) Students will be able to analyze the feasibility of a design project (urgency, complexity, impact) based on scientifically justifiable data, considering aesthetic aspects, user comfort, and safety in accordance with design principles, considering the design context (such as history, lifestyle, local culture). 2) Students will be able to create a project design plan or determine the steps to be taken in implementing the final project. 3) Students will be able to present data and design research analysis verbally/written according to the standards of academic writing. 4) Students will be able to present data and design research analysis visually in a design portfolio, using both print and digital media (multimedia). 5) Students will be able to communicate the research process for the feasibility of the design project in the form of an oral presentation.
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
	The Design Research course is an introductory course to construct the feasibility study for the final project that will be taken in the following semester. In this course, relevant design theories (that have been obtained in the previous semester) are implemented in the preparation of a final project design proposal, including Product Design Scope of Work, Design Thinking, Design Methodology, Design Ethnography, Creativity, Primary

	T
	and Secondary Data Collection Techniques, Business Analysis, User or Customer Analysis, Environmental / Social / Regulatory Analysis, Design Concepts (Design Requirements and Objectives), Construct Preliminary Design, Academic Publications, Design Presentations. In this course, students will be able to apply the principles of design thinking in data collection, apply user-related theories to design projects, such as user experience design, ethnographic design methods, personas, mapping consumer journeys, determining design methods, and formulating design concepts, implement design concepts into design ideas, visualize design ideas using manual and digital media, present design projects through academic writing, posters, and verbal presentations.
Recommended or required reading and other learning resources/tools	<ul> <li>Anon, &amp; Villaumbrosia. (2017). The Product Book: How to Become a Great Product Manager. Product School.</li> <li>Banfield, Eriksson and Walkingshaw (2017). Product Leadership: How Top Product Managers Launch Awesome Products and Build Successful Teams.</li> <li>O'Reilly Media, Inc.</li> <li>Cagan, Marty. (2017) INSPIRED: How to Create Tech Products Customers Love. Wiley</li> <li>Kalbach, J. (2016). Mapping experiences: A complete guide to creating value through journeys, blueprints, and diagrams. "O'Reilly Media, Inc.".</li> <li>Nunnally, B., &amp; Farkas, D. (2016). UX Research: Practical Techniques for Designing Better Products.</li> <li>O'Grady, J. V., &amp; O'Grady, K. V. (2017). A Designer's Research Manual, Updated and Expanded: Succeed in Design by Knowing Your Clients and Understanding what They Really Need. Rockport.</li> </ul>
Planned learning activities and teaching methods	Discovery Learning; Case Method
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

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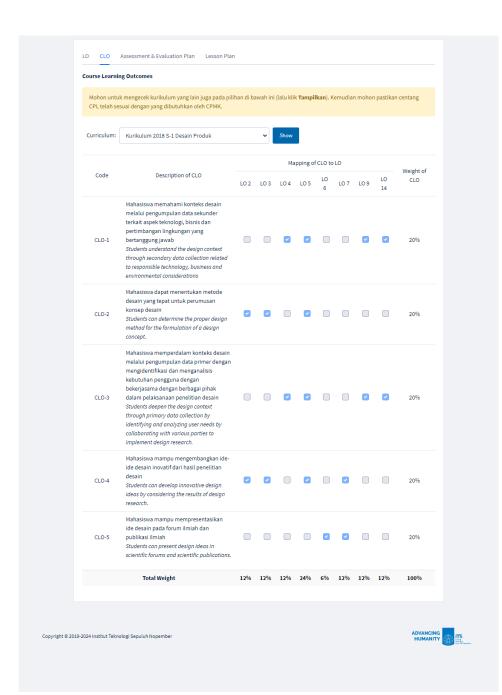
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sess	sment & Evaluation Plan						
No.	Evaluation Plan	CLO-1	CLO-2	CLO-3	CLO-4	CLO-5	Total Weight
1	Kajian Pustaka <i>Literature Review</i> Studi Kasus   <i>Case Method</i>	20%	0%	0%	0%	0%	20%
2	Metode Desain Design Method Studi Kasus   Case Method	0%	20%	0%	0%	0%	20%
3	Data Primer dan Analisis Data Primer dan Analisis Studi Kasus   Case Method	0%	0%	30%	0%	0%	30%
4	Ideasi Solusi Desain <i>Design Ideas</i> Studi Kasus   <i>Case Method</i>	096	096	096	10%	0%	10%
5	Kolokium Colloquium Studi Kasus   Case Method	0%	0%	096	0%	20%	20%
	TOTAL Target	20% 20%	<b>20%</b> 20%	<b>30%</b> 20%	10% 20%	<b>20%</b> 20%	100% 100%

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son Plan			
eeknum	Course Material	Learning Method	
1	Ruang Lingkup Riset Desain Industri, aspek-aspek inovasi: feasibility, viability dan desirability dan hipotesis terhadap suatu konteks desain The scope of industrial Design Research, aspects of innovation: feasibility, viability, and desirability, and hypotheses of a design context.	Metode SCL lainnya	<b>8</b>
2	Telusur literatur ilmiah yang relevan dan valid Advanced information Retrieval Skill to search relevant and valid scientific literature.	Metode SCL lainnya	<b>E</b>
3	Identifikasi konteks desain dan proses desain yang relevan untuk mengerjakan proyek desain identify the design context and relevant design process for starting on a design project.	Case method	C G
4	Analisis perbandingan produk dengan mengidentifikasi nilai / value pada produk kompetitor, menentukan value desain yang akan dikembangkan berdasar analisis perbandingan produk yang sudah ada sebelumnya, sekaligus mempredikai target penggunanya Create a bench-marking analysis by identifying the value of competitors' products and determine the design value to be developed as well as predict the prospective target user	Case method	<b>6</b>
5	Pengumpulan data primer kepada target pengguna dan/atau ahli di bidang terkait Primary data collection to target users and/or experts in related fields	Case method	<b>E</b>
6	Memahami target pengguna melalui Pemetaan Pengalaman Pengguna/Pelanggan dan Peta Empati Understanding users by moking a User/Customer Journey Map and Empathy Map	Case method	<b>2 a</b>
7	Mengelompokkan dan membuat prioritas kebutuhan pengguna dengan Affinity Diagram, serta membuat Design Requirement and Objectives (DR&O) Grouping and prioritizing user needs using Affinity Diagramming, then developing a Design Requirement and Objectives (DR&O)	Case method	8
8	Presentasi Kemajuan Proyek Desain Design Project - Progress Presentation	Metode SCL lainnya	
9	Pengembangan alternatif desain /ide inovatif dengan Visualisasi manual atau digital Development of innovative Design Ideas by Manual or Digital Visualization	Case method	<b>E</b>
10	Seleksi desain berdasar kebaruan ide dan relevansi dengan kebutuhan pengguna Design selection based on novelty and relevance to user needs	Case method	<b>2</b> •
11	Pengujian ide desain kepada calon pengguna Testing design ideas to potential users	Case method	
12	Komunikasi desain dalam media digital Design Communication in digital media	Metode SCL lainnya	
13	Persiapan Publikasi Ilmiah: Jenis publikasi ilmiah, Aspek publikasi ilmiah, Sistem referensi, Plagiarisme, dan Menulis Abstrak Academic Publication Preparation: Types of scientific publications, Aspects of scientific publications, Reference system, Plagiarism and Writing an Abstract	Metode SCL lainnya	<b>☑</b> ê
14	Penulisan latar belakang, tinjauan pustaka, metode, pembahasan, kesimpulan dan referensi pada jurnal ilmiah Writing bockground, literoture review, methods, discussions, conclusions and references in scientific journals	Metode SCL lainnya	<b>6</b>
15	Persiapan Presentasi : alur, penekanan, visualisasi, intonasi, gaya bahasa, manajemen waktu Presentation Preparation: flow, emphasis, visualization, intonation, style, time management	Metode SCL lainnya	<b>8</b>
16	Presentasi Kolokium Colloquium 1	Metode SCL lainnya	C D
	Bahasa Indonesia	Choose method ▼	B ×
	English		



# Technopreneur DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



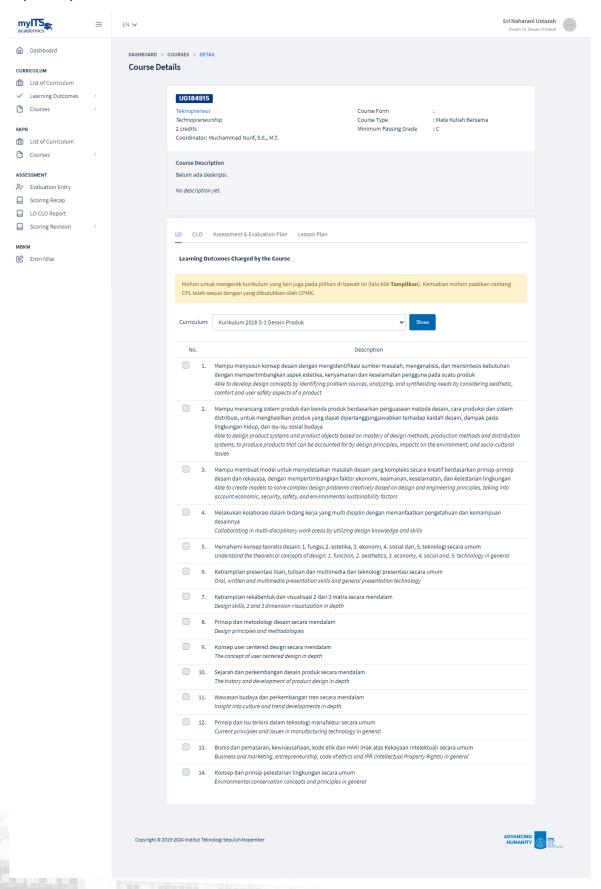
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

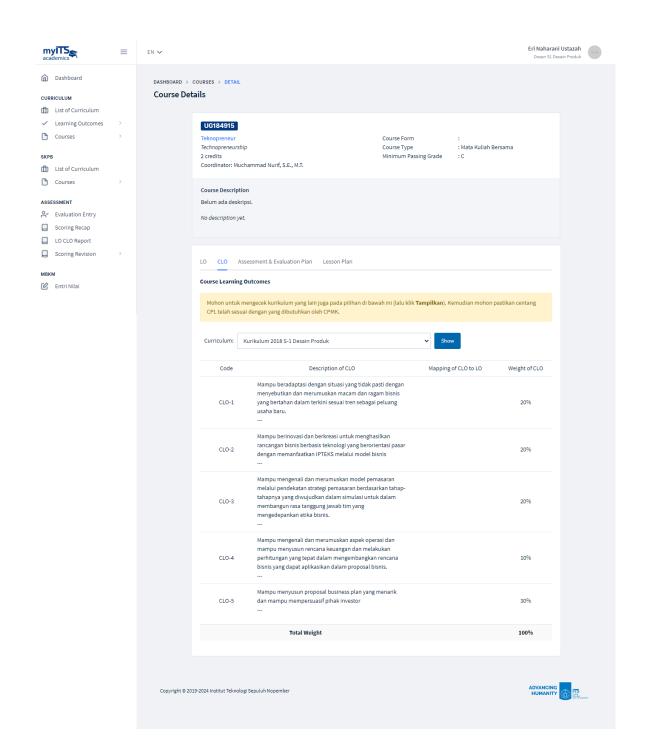
Course unit title	Technopreneur
Course unit code	UG 4915
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (according to EQF: first cycle Bachelor, second cycle Master)	First Cycle Bachelor
Year of study when the course unit is delivered (if applicable)	4 <sup>th</sup> year
Semester/trimester when the course unit is delivered	<b>7</b> <sup>th</sup>
Number of ECTS credits allocated	3,2
Name of lecturer(s)	Muchammad Nurif, SE. MT.
Learning outcomes of the course unit	<ol> <li>Able to adapt to the situation at hand and survive in uncertain conditions.</li> <li>Able to adapt to uncertain situations by calculating feasibility analysis.</li> <li>Able to innovate and be creative to produce market-oriented technology-based business/product designs (prototypes) by utilizing science and technology.</li> <li>Able to recognize and formulate marketing models and formulate the needs of HR aspects through a marketing strategy approach based on its stages which are realized in simulations to build a sense of team responsibility that prioritizes business ethics.</li> <li>Able to compile financial plans and formulate the needs of operating aspects can be applied in business proposals.</li> <li>Able to compile an attractive business plan proposal and be able to persuade investors.</li> </ol>
Mode of delivery (face-to-face, distance learning)	Face-to-Face
Prerequisites and co-requisites (if applicable)	-
Course content	<ol> <li>Introduction to Technopreneur and Business</li> <li>Recognizing Opportunities and Creating Business Ideas</li> <li>Business Feasibility</li> <li>Developing an effective Business Model</li> <li>Systematics of Business Plan Writing</li> <li>Marketing Management</li> <li>Operations and HR Management</li> </ol>

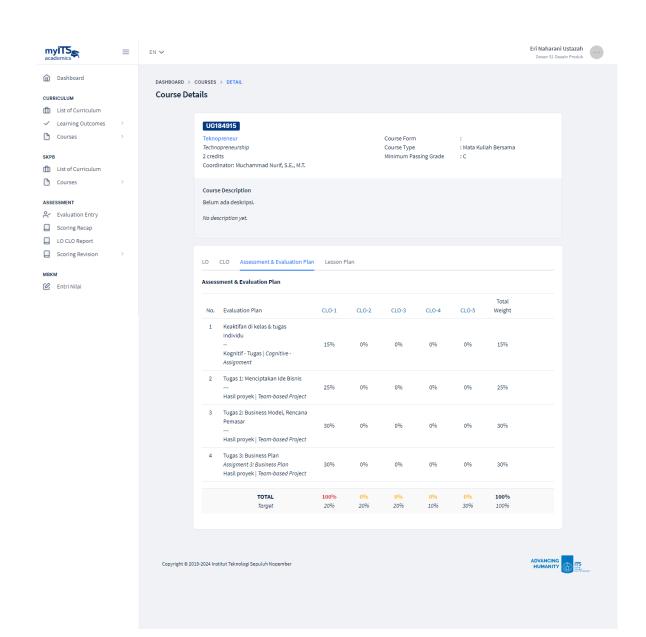
	Financial Management
Recommended or required reading and other learning resources/tools	<ol> <li>Barringer, B. R., &amp; Ireland, R. D. (2010).         Entrepreneurship: Successfully launching new ventures. Upper Saddle River, N.J: Prentice Hall.</li> <li>International Labor Organization, Generate Your Business Idea</li> <li>International Labor Organization, Memulai Bisnis</li> <li>Osterwalder, A., Pigneur, Y., &amp; Clark, T. (2010).         Business model generation: A handbook for visionaries, game changers, and challengers.         Hoboken, NJ: Wiley.</li> <li>William, B. K., Sawyer, S. C., Berston, S., (2013). Business: A Practical Introduction. Upper Saddle River, N.J: Prentice Hall</li> <li>Kotler, Philips (2002). Majemen Pemasaran.         Erlangga (translated edition)</li> </ol>
Planned learning activities and teaching methods	Problem-Based Learning
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

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ASSESSMENT

A

✓ Evaluation Entry Scoring Recap

LO CLO Report

Scoring Revision

Entri Nilai

DASHBOARD > COURSES > DETAIL Course Details

> UG184915 Technopreneurship Course Type : Mata Kuliah Bersama 2 credits Minimum Passing Grade

> > Learning Method

Team-based project

Case method

Team-based project

Team-based project

Case method

Team-based project

Team-based project

Case method

Coordinator: Muchammad Nurif, S.E., M.T.

Course Description Belum ada deskripsi.

No description yet.

LO CLO Assessment & Evaluation Plan Lesson Plan

Lesson Plan

Pengantar Technopreneur dan Bisnis ? Mampu menjelaskan prinsip Technoprenuer dan perannya. ? Mampu mengidentifikasi dan menjelaskan karakteristik successful Technopreneur? Mampu

menjelaskan proses menjadi seorang Technopreneu ? Mampu menjelaskan peranan Technopreneurship dalam masyarakat

Mengenali Peluang dan Menciptakan Ide Bisnis ? Mengenali Feluang dan Menciptakan ide isinsi ? Mampu menjelaskan pentingnya memulali usaha baru ? Mampu mengidentifikasi karakteristik personal yang diperlukan untuk mengindentifikasi peluang bisnis ? Memahami langkah-langkah kreatif dalam mengidentifikasi peluang bisnis

Kelayakan Bisnis ? Mampu menjelaskan pentingnya Team-based project analisis kelayakan ide bisnis ? Mampu menjelaskan dan mengaplikasikan concept statement dan market feasibility. ? Mampu mengevaluasi kelayakan ide

bisnis

PRESENTASI TUGAS 1 Case method

Mengembangkan Business Model yang effektif? Mampu menjelaskan inovasi model bisnis? Mampu menyusun dan merancang Business Model Canvas berdasarkan ide bisnis yang telah diusulkan.?

PRESENTASI TUGAS 1

Mampu mengevaluasi model bisnis Mengembangkan Business Model yang effektif?

Mampu menjaksi duansas model bisnis ? Mampu menyusun dan merancang Business Model Canvas berdasarkan ide bisnis yang telah diusulkan. ? Mampu mengevaluasi model bisnis

Manajemen Pemasaran • Mampu memahami aspek Team-based project pasar secara keseluruhan • Memahami aspek pemasaran dan strategi pemasaran - Memahami konsep 4P Place, Product, Price Promotion - Mampu mengaplikasikan rencana pemasaran pada ide usaha

PRESENTASI TUGAS 2 Case method

10 Sistematika Penulisan Business Plan ? Mampu menjelaskan tujuan dari business plan ? Mampu 11 menulis business plan secara sistematis dan efektif

PRESENTASI TUGAS 2

Manajemen Operasional dan SDM ? Mampu menjelaskan proses bisnis dari ide bisnis yang dirancang. ? Mampu memahami bagaimana cara membuat struktur organisasi dan menyusun manajemen organisasi yang baik.

Manajemen Keuangan ? Mampu memahami fungsi aspek keuangan dari pembuatan business plan ? Mampu menghitung break even point ? Mampu menghitung kebutuhan modal kerja

PAMERAN PRODUK TECHNOPRENEUR dikelas masing Case method 14

PRESENTASI TUGAS 3 15

ADVANCING HUMANITY



9



# Internship DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023

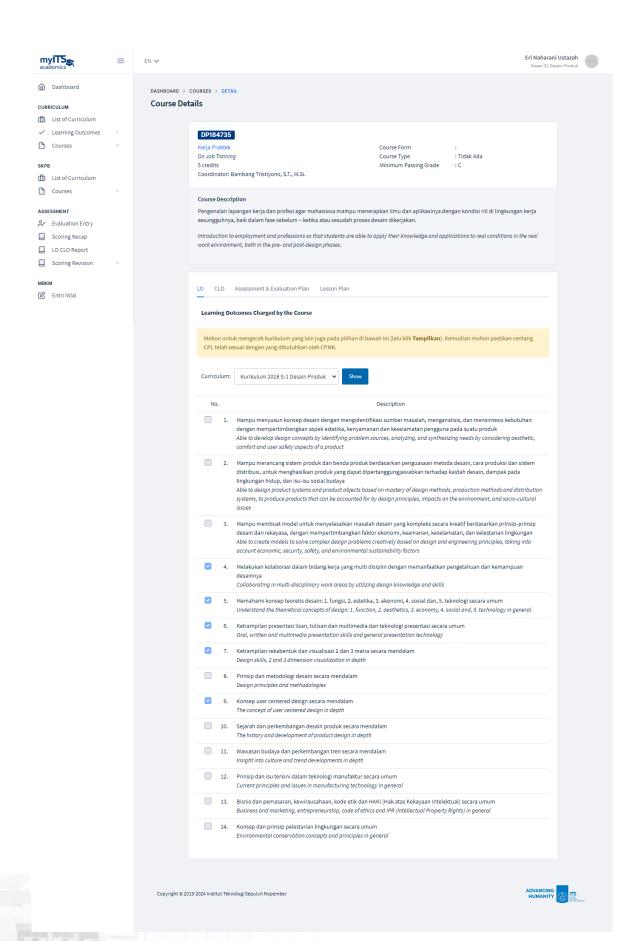


### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

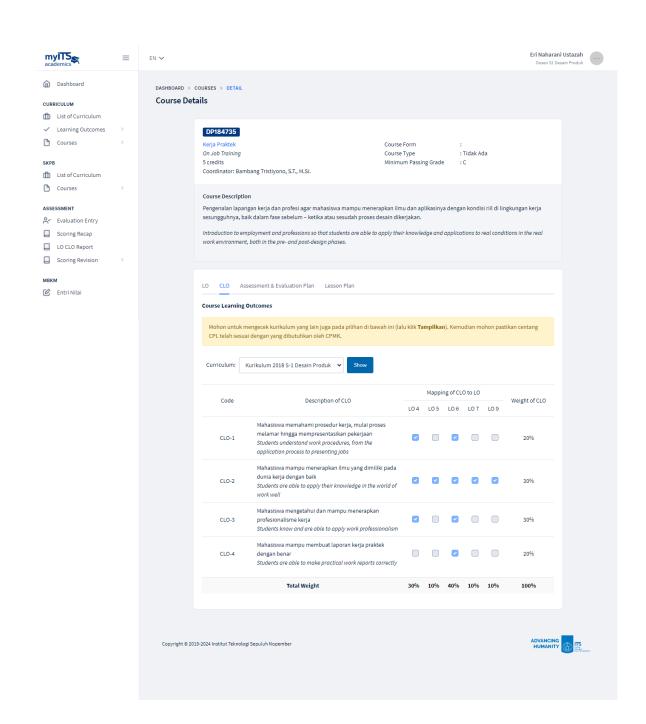
Course unit title	Internship
Course unit code	DP184735
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	4 <sup>th</sup> year
Semester/trimester when the course unit is delivered	7 <sup>th</sup> semester
Number of ECTS credits allocated	8 ECTS Credits
Name of lecturer	Bambang Tristiyono, S.T., M.Si.
Learning outcomes of the course unit	1) Students will understand the work procedures, starting from the job application process to presenting their work.  2) Students will be able to apply their knowledge in the workplace effectively.  3) Students will be knowledgeable about and capable of applying professional work standards.
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	Introduction to employment and professions so that students are able to apply their knowledge and applications to real conditions in the real work environment, both in the pre- and post-design phases.  1) Workplace conditions and situations 2) Company profiles 3) Design jobs 4) Recommendations
Recommended or required reading and other learning resources/tools	Panduan Kerja Praktek, Jurusan Desain Produk Industri FTSP ITS, 2009
Planned learning activities and teaching methods	Project Based Learning; Team Based Learning
Language of instruction	Indonesia
Assessment methods and criteria	Internship Report

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A Evaluation Entry

Scoring Recap

LO CLO Report

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Entri Nilai

Pengenalan lapangan kerja dan profesi agar mahasiswa mampu menerapkan ilmu dan aplikasinya dengan kondisi riil di lingkungan kerja sesungguhnya, baik dalam fase sebelum – ketika atau sesudah proses desain dikerjakan.

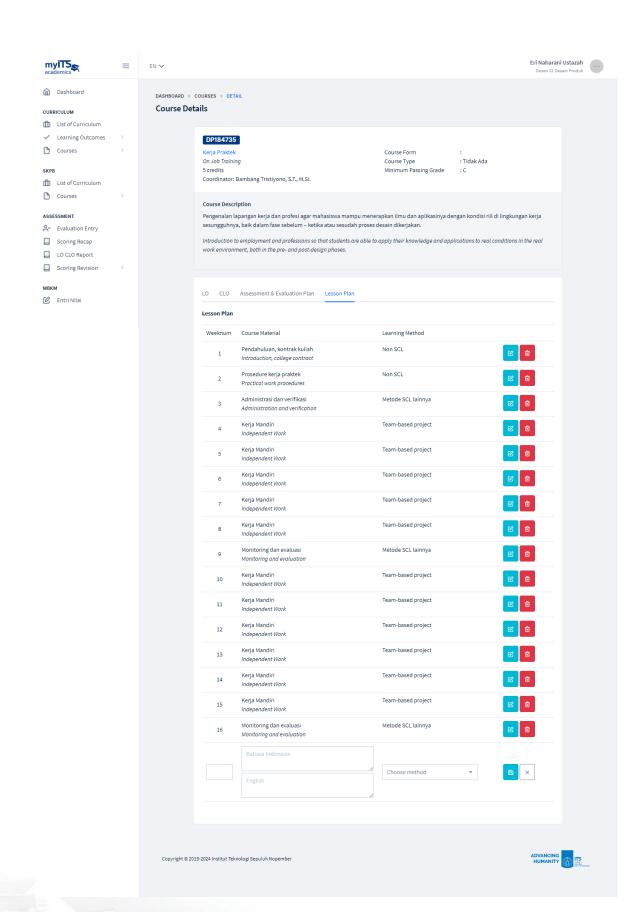
Introduction to employment and professions so that students are able to apply their knowledge and applications to real conditions in the real work environment, both in the pre- and post-design phases.

LO CLO Assessment & Evaluation Plan Lesson Plan Assessment & Evaluation Plan 1 Membuat laporan kerja praktek Make practical work reports laporan 20% 20% Hasil provek | Team-based Project 2 Tugas 1: prosedur kerja, mulai Task 1: work procedures, starting 20% 0% 096 096 2096 from t Kognitif - Tugas | Cognitive -Assignment 3 Tugas 2: Menerapkan ilmu yang dimiliki p Task 2: Applying knowledge in the 3096 Hasil proyek | Team-based Project 4 Tugas 3: Menerapkan profesionalisme kerj Task 3: Apply work professionalism 3096 Hasil proyek | Team-based Project TOTAL 20% Target

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Eri Naharani Ustazah





## 8th SEMESTER

Bachelor of Industrial Design (BOID)





# Design Management DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023

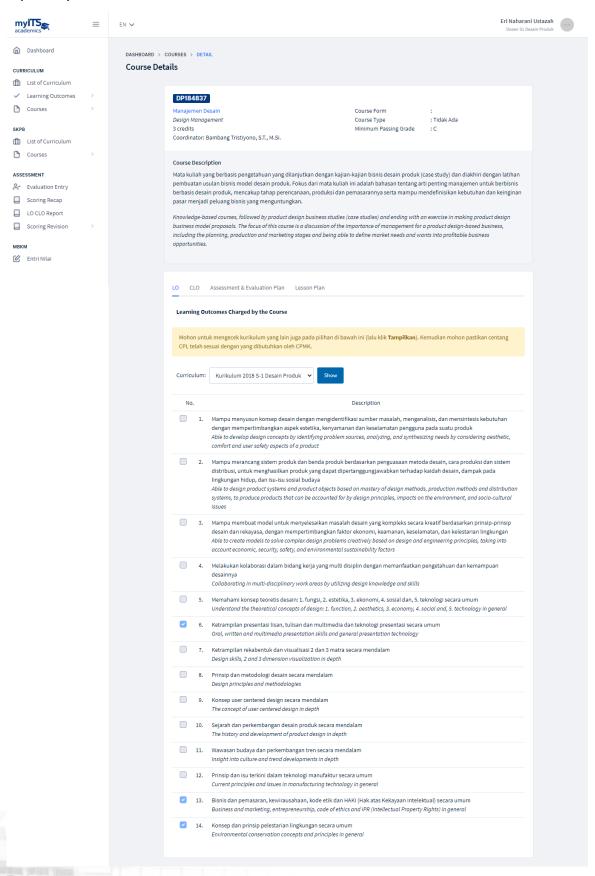
### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

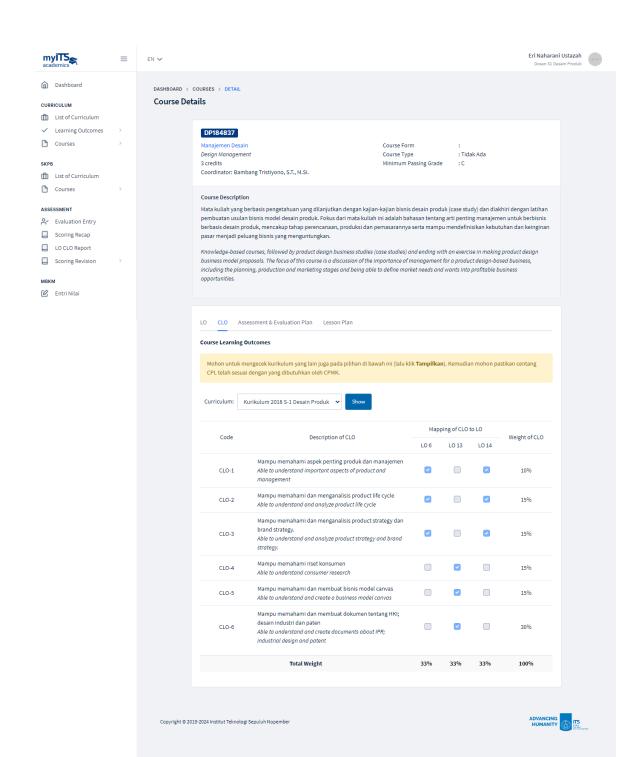
Course unit title	Design Management
Course unit code	DP184837
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	4 <sup>th</sup> year
Semester/trimester when the course unit is delivered	8 <sup>th</sup> semester
Number of ECTS credits allocated	4,8 ECTS Credits
Name of lecturer	Bambang Tristiyono, S.T., M.Si.
	1) Internalizing the spirit of independence, financial literacy, and entrepreneurship. 2) Applying logical, critical, systematic, and innovative thinking in the development or implementation of knowledge and technology, considering and applying relevant humanistic values in their field of expertise. 3) Communicating design concepts and specifications, including the ability to present designs orally, in writing, and through multimedia, in abstract and detailed functional forms. 4) Applying technology and equipment related to multidimensional design representation (2D and 3D) in design development. face-to-face
Prerequisites and co-requisites	-
Course content	Knowledge-based courses, followed by product design business studies (case studies) and ending with an exercise in making product design business model proposals. The focus of this course is a discussion of the importance of management for a product design-based business, including the planning, production and marketing stages and being able to define market needs and wants into profitable business opportunities.  1) Essential aspects of products and management. 2) Design process. 3) Product life cycle. 4) Product strategy and brand strategy.

	·
Recommended or required	<ul> <li>5) Product launching.</li> <li>6) Business model/business plan.</li> <li>7) Intellectual Property Rights (HAKI) in industrial design.</li> <li>Debbie Millman (2011), Brand Thinking and Other</li> </ul>
reading and other learning resources/tools	Noble Pursuits, Allworth Press, New York, 2011  Grieves, Michael (2005). Product Lifecycle Management: Driving the Next Generation of Lean Thinking. McGraw-Hill. ISBN 978-0-07-145230-4.  Haris Munandar (2009), Mengenal HAKI (Hak Kekayaan Intelektual), Airlangga, ISBN; 9789790331952.  Karnie, Arie; Reich, Yoram (2011). Managing the Dynamic of New Product Development Processes. A new Product Lifecycle Management Paradigm. Springer. hlm. 13. ISBN 978-0-85729-569-9. Diakses 25 February 2012.  Kathryn Best (2006), Design Management-Managing Design Strategy, Process and Implementation, AVA Publishing SA, Lausanne.
Planned learning activities and teaching methods	Case Method; Team Based Learning
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

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#### CURRICULUM

☐ List of Curriculum

✓ Learning Outcomes

Courses

#### SKPB

List of Curriculum

Courses

#### ASSESSMENT

A Evaluation Entry

Scoring Recap

LO CLO Report

Scoring Revision

#### мвкм

Entri Nilai

DASHBOARD > COURSES > DETAIL

#### Course Details

#### DP184837

Manajemen Desain Design Management 3 credits Course Form Course Type Minimum Passing Grade

: : Tidak Ada

Coordinator: Bambang Tristiyono, S.T., M.Si.

#### Course Description

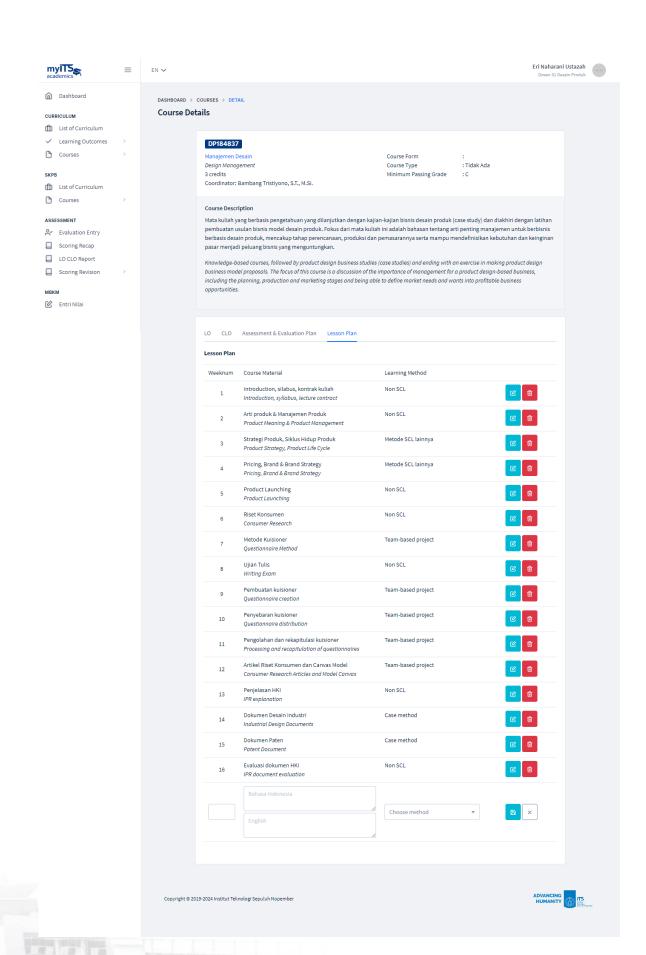
Mata kuliah yang berbasis pengetahuan yang dilanjutkan dengan kajian-kajian bisnis desain produk (case study) dan diakhiri dengan latihan pembuatan usulan bisnis model desain produk. Fokus dari mata kuliah ini adalah bahasan tentang arti penting manajemen untuk berbisnis berbasis desain produk, mencakup tahap perencanaan, produksi dan pemasarannya serta mampu mendefinisikan kebutuhan dan keinginan pasar menjadi peluang bisnis yang menguntungkan.

Knowledge-based courses, followed by product design business studies (case studies) and ending with an exercise in making product design business model proposals. The focus of this course is a discussion of the importance of management for a product design-based business, including the planning, production and marketing stages and being able to define market needs and wants into profitable business opportunities.

LO	CLO	Assessment & Evaluation Pl	an Lesso	n Plan						
Asses	ssessment & Evaluation Plan									
No.	Evalu	ation Plan	CLO-1	CLO-2	CLO-3	CLO-4	CLO-5	CLO-6	Total Weight	
1	soft s soft si Studi		5%	10%	10%	0%	0%	0%	25%	
2	Kogn	Tulis ng Exam itif - UTS   Cognitive - rrm Exam	5%	5%	5%	0%	0%	0%	15%	
3	Const	s Riset Konsumen umer Research Tasks Kasus   Case Method	096	096	0%	15%	15%	0%	30%	
4	Tugas IPR to Studi		096	0%	0%	0%	0%	30%	30%	
		TOTAL Target	<b>10%</b> 10%	<b>15%</b> <i>15</i> %	<b>15%</b> 15%	<b>15%</b> <i>15</i> %	<b>15%</b> 15%	<b>30%</b> 30%	100% 100%	

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# Final Project DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk Bachelor of Industrial Design (BOID) 2018-2023



### <u>Description of Course Unit</u> according to the ECTS User's Guide 2015

Course unit title	Final Assignment
Course unit code	DP184838
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	4 <sup>th</sup> year
Semester/trimester when the course unit is delivered	8 <sup>th</sup> semester
Number of ECTS credits allocated	12,8 ECTS Credits
Name of lecturer	Bambang Tristiyono, S.T., M.Si.
Learning outcomes of the course unit	1) Execute a design project based on the planning steps tested in the Design Proposal course. 2) Document each step of the design implementation in detail and neatly, being able to academically justify the design work. 3) Present design research data and analysis verbally/written according to academic writing standards. 4) Present design research data and analysis visually in a design portfolio, using both print and digital media (multimedia). 5) Communicate the research process in the final project design through oral presentations.
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	The Final Project Course is a studio course which is a continuation of the design project from the feasibility study that has been carried out in the Design Proposal Course. In this course, students carry out their design tasks independently under the supervision of a supervisor. The relevant design theories (which have been obtained in the previous semester) are implemented in the final project project design task  1) Design Process
State A World	2) Conceptualization

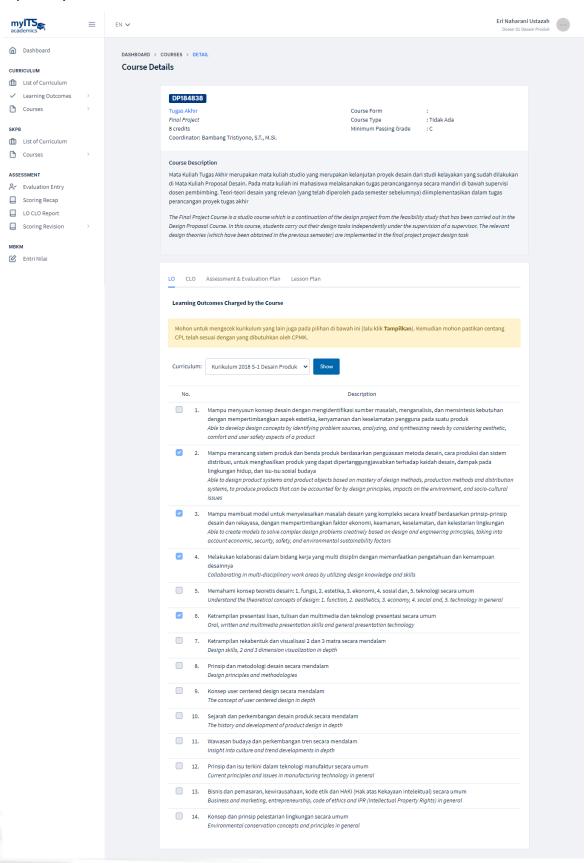
	3) Emerging Technologies
	4) Design in Context
	5) Design and Sustainability
	6) Problem Solving with Design
	7) Design Thinking
	8) Design Factors
	9) Design Objectives
	10) Design Research
	11) Verbal Communication: Oral and Academic Writing
	12) Visual Communication: Perspective, Sketch,
	Drawing, Rendering, CAD, and Professional Portfolio
	Creation
	13) Human Factors
	14) Material, Production, Prototyping & Model Making
	15) Manufacturing Planning
	<ul><li>16) Leadership and Project Management</li><li>17) Collaboration with Other Disciplines</li></ul>
	17) Collaboration with Other Disciplines  18) Marketing
	19) Intellectual Property Rights (IPR)
	20) Business Planning & Resourcing
Recommended or required	• Anon, & Villaumbrosia. (2017). The Product Book:
reading and other learning	How to Become a Great Product Manager. Product
resources/tools	School.
	Banfield, Eriksson and Walkingshaw (2017). Product
	Leadership: How
	Top Product Managers Launch Awesome Products and
	Build Successful Teams. O'Reilly Media, Inc.
	• Blessing, L. T., & Chakrabarti, A. (2009). DRM, a
	design research methodology. Springer Science &
	Business Media.
	• Cagan, Marty. (2017) INSPIRED: How to Create Tech Products Customers Love. Wiley
	• Cohen, A. (2015). Prototype to Product: A Practical
	Guide for Getting to Market. O'Reilly Media, Inc
	• Cooper, R. G. (2011). Winning at new products:
	Creating value through innovation. Basic Books (AZ).
	• Dorst, K., & Cross, N. (2001). Creativity in the design
	process: coevolution of problem–solution. Design
	studies, 22(5), 425-437.
	Greenberg, S., Carpendale, S., Marquardt, N., &
	Buxton, B. (2011). Sketching user experiences: The
	workbook. Elsevier.
	• Kalbach, J. (2016). Mapping experiences: A complete
	guide to creating value through journeys, blueprints,
	and diagrams. " O'Reilly Media, Inc.".
	• Koskinen, I., Zimmerman, J., Binder, T., Redstrom, J.,
	& Wensveen, S. (2011). Design research through
	practice: From the lab, field, and showroom. Elsevier.
	• Laurel, B. (2003). Design research: Methods and
	perspectives. MIT press.  • Marczyk, G., DeMatteo, D., & Festinger, D. (2005).
A	Essentials of research design and methodology. John
	Loosemalo of research design and methodology. John

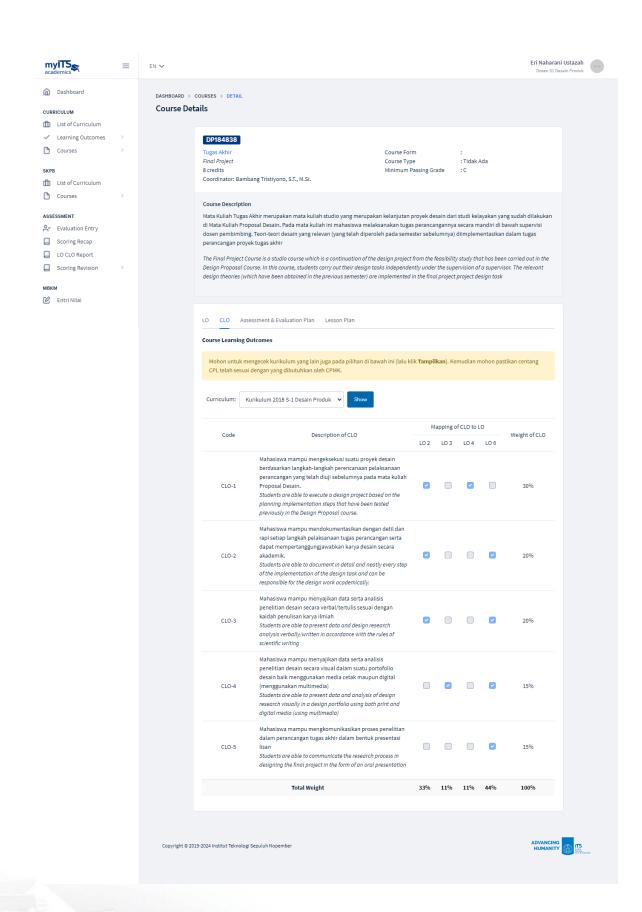
Wiley & Sons Inc.
• Milton, A., & Rodgers, P. (2013). Research methods

Planned learning activities and teaching methods	for product design. Laurence King Publishing.  • Muratovski, G. (2015). Research for designers: A guide to methods and practice. Sage.  • Nunnally, B., & Farkas, D. (2016). UX Research: Practical Techniques for Designing Better Products.  • O'Grady, J. V., & O'Grady, K. V. (2017). A Designer's Research Manual, Updated and Expanded: Succeed in Design by Knowing Your Clients and Understanding what They Really Need. Rockport.  • Radjou, N., & Prabhu, J. (2015). Frugal Innovation: How to do more with less. The Economist.  • Urban, G. L., & Hauser, J. R. (1980). Design and marketing of new products. Prentice hall.  • Ward, D. (2014). FIRE: How Fast, Inexpensive, Restrained, and Elegant Methods Ignite Innovation. Harper Collins.  Discovery Learning
Language of instruction	Indonesia
Assessment methods and criteria	Final project report

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0	CLO	Assessment & Evaluation Pla	an Lesson P	lan					
sses	sment &	& Evaluation Plan							
No.	Evalu	ation Plan	CLO-1	CLO-2	CLO-3	CLO-4	CLO-5	Total Weight	
1	Desig	kusi konsep desain In concept execution I Kasus   Case Method	35%	0%	0%	0%	0%	35%	
2	doku Portfi prese	ajian portofolio dan men olio and document entation I Kasus   Case Method	0%	15%	0%	15%	0%	30%	
3	Final Kogn	ran Tugas Akhir report iitif - Tugas   Cognitive - nment	0%	5%	10%	0%	5%	20%	
4	Sidar Sessi Prese Kogn	unikasi dan Presentasi 18 on Communication and entation litif - Tugas   Cognitive - nment	0%	0%	0%	0%	15%	15%	
		<b>TOTAL</b> Target	<b>35%</b> 30%	<b>20%</b> 20%	10% 20%	<b>15%</b> 15%	<b>20%</b> 1596	<b>100%</b> 10096	



Eri Naharani Ustazah

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