



INSTITUT TEKNOLOGI SEPULUH NOPEMBER (ITS)
FAKULTAS TEKNOLOGI ELEKTRO DAN INFORMATIKA CERDAS
DEPARTEMEN TEKNIK ELEKTRO
Program Studi Sarjana (S1) Teknik Telekomunikasi

1	Nama Mata Kuliah / Course Name : Manajemen Proyek Telekomunikasi / <i>Telecommunication Projects Management</i>
2	Kode Mata Kuliah / Course Code : EL234601
3	Kredit / Credits : 2 SKS
4	Semester / Semester : 6

Deskripsi Mata Kuliah / Course Description

Mata kuliah Manajemen Proyek Telekomunikasi membahas manajemen proyek di bidang telekomunikasi yang berhubungan dengan desain dan/atau rekayasa terhadap sistem dan jaringan telekomunikasi.

The Telecommunications Project Management course covers project management in the telecommunications field related to design and/or engineering of telecommunications systems and networks.

Capaian Pembelajaran Lulusan (CPL) Yang Dibebankan Mata Kuliah / Program Learning Outcomes Charged to The Course

1. (CPL-05) Mampu merancang komponen, sistem, dan proses yang logis dan realistis sesuai dengan spesifikasi yang ditentukan dengan mempertimbangkan aspek keselamatan, sosial, budaya, lingkungan, dan ekonomi.
(PLO-05) Able to design components, systems, and/or processes to meet desired needs within realistic constraints in such aspects as law, economic, environment, social, politics, health and safety, sustainability as well as to recognize and/or utilize the potential of local and national resources with global perspective
2. (CPL-07) Mampu mengidentifikasi, memformulasikan, menganalisis, dan menyelesaikan permasalahan kompleks di bidang teknik telekomunikasi.
(PLO-07) Able to identify, formulate, analyze, and solve the complex problems in the field of Telecommunication Engineering
3. (CPL-10) Mampu bekerja secara efektif dalam kelompok yang beranggotakan lintas disiplin dan budaya dengan menunjukkan sifat kepemimpinan, serta mampu merencanakan, melaksanakan dan mengevaluasi tugas pada kondisi yang diberikan.
(PLO-10) Able to work effectively in multidisciplinary and multicultural team by showing a leadership character to plan, accomplish, and evaluate tasks under given constraints

Capaian Pembelajaran Mata Kuliah / Course Learning Outcomes

1. Mampu menjelaskan metode optimasi/rekayasa sistem dan jaringan telekomunikasi / *Able to explain optimization/engineering methods for telecommunications systems and networks*
2. Mampu menjelaskan prinsip-prinsip manajemen proyek telekomunikasi dalam industri telekomunikasi / *Able to explain the principles of telecommunications project management in the telecommunications industry*
3. Mampu secara berkelompok menyusun TOR, proposal, dan/atau laporan proyek telekomunikasi / *Able to work in a team to prepare TOR (terms of reference), proposals, and/or reports for telecommunications projects*
4. Mampu secara berkelompok menggagas, merancang, dan/atau melaksanakan proyek yang bermanfaat bagi masyarakat, membuat laporan proyek dan mempersentasikannya. / *Able to work in a team to conceive, design, and/or implement projects that are beneficial to society, create project reports, and present them.*

Pokok Bahasan / Contents

1. Arsitektur industri telekomunikasi / *Telecommunication Industry Architecture*
2. Rekayasa dan Optimasi Sistem dan Jaringan Komunikasi / *Communication System and Network Engineering and Optimization*
3. Proyek, Manajemen Proyek, Work Breakdown Structure / *Project, Project Management, Work Breakdown Structure*
4. Penjadwalan dengan CPM dan Cash Flow / *Scheduling with CPM and Cash Flow*
5. Manajemen Risiko, Organisasi Proyek / *Risk Management, Project Organization*
6. Tahap-tahap persiapan, pelaksanaan, dan pelaporan proyek / *Project Preparation, Execution, and Reporting Phases*
7. Tinjauan Kasus-kasus / *Case Studies*
8. Penulisan TOR dan/atau proposal proyek / *Writing Project TOR and/or Proposal.*

Prasyarat / Pre-requisite

Jaringan Komunikasi Data, Elektronika Komunikasi, Sistem Komunikasi /

Pustaka / Reference

Utama / Primary :

1. Hamdy A. Taha, Operations Research: An Introduction, ed. 10, Prentice Hall, 2016.
2. Bernard Sklar, Digital Communications Fundamentals and Applications, ed. 3, Pearson, 2021.
3. Mostafa H. Sherif, Managing Projects in Telecommunication Services, John Wiley and Sons, 2007.

Pendukung / Support:

1. Celia L. Desmond, The ComSoc Guide to Managing Telecommunications Projects, Wiley-IEEE Press, 2011.