

### Description of Course Unit

Course unit title	Engineering Mathematics
Course unit code	VW 191901
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)	
Semester/trimester when the course unit is delivered	1
Number of ECTS credits allocated	4,8
Name of lecturer(s)	Destri Susilaningrum and Iis Dewi Ratih
Learning outcomes of the course unit	<ul style="list-style-type: none"> <li>- Students are able to explain and apply the concept of Sets and Real Number Systems and their applications</li> <li>- Students are able to apply concept functions and limits in the fields of science and engineering</li> <li>- Students are able to apply the concept of Differential / Derivatives in the field of science and engineering</li> <li>- Students are able to apply integral concepts and apply them to the fields of science and engineering</li> </ul>
Mode of delivery (face-to-face, distance learning)	Face to face
Prerequisites and co-requisites (if applicable)	-
Course content	<ol style="list-style-type: none"> <li>1. Set</li> <li>2. Real number system</li> <li>3. Function</li> <li>4. Limit</li> <li>5. Derivatives</li> <li>6. Integrals</li> </ol>
Recommended or required reading and other learning resources/tools	<ol style="list-style-type: none"> <li>1. Kreysig, E., Advance Engineering Mathematics, 10th edition, John Wiley &amp; Sons, NY, 2011</li> <li>2. Purcell, J, E, Rigdon, S., E., Calculus, 9-th edition, Prentice-Hall, New Jersey, 2006</li> </ol>
Planned learning activities and teaching methods	Problem Based Learning, Blended Learning
Language of instruction	Indonesian Language
Assessment methods and criteria	Assignment, Quiz, Midterm Exam and Final Exam.