

Department of Mathematics  
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|---------------|------------------------------------------------------------------------|
| <b>Course</b> | <b>Course Name</b> : <b>Topics in Modeling, System, and Simulation</b> |
|               | <b>Course Code</b> : <b>KM184819</b>                                   |
|               | <b>Credit</b> : <b>2</b>                                               |
|               | <b>Semester</b> : <b>8</b>                                             |

| <b>Description of Course</b>                                                                                                                                                                                                             |                                                                                                                                                                                                                       |
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| This course examines new topics of modeling, optimization and other applied. Paper / paper studies on the topic are presented in the form of discussions and presentations. It is hoped that the topics of the final project will arise. |                                                                                                                                                                                                                       |
| <b>Learning Outcome</b>                                                                                                                                                                                                                  |                                                                                                                                                                                                                       |
| PLO 1                                                                                                                                                                                                                                    | [C2] Students are able to identify and explain foundations of mathematics that include pure, applied, and the basic of computing                                                                                      |
| PLO 2                                                                                                                                                                                                                                    | [C3] Students are able to solve simple and practical problems by applying basic mathematical statements, methods and computations                                                                                     |
| PLO 3                                                                                                                                                                                                                                    | [C4] Students are able to analyze simple and practical problems in at least one field of analysis, algebra, modeling, system optimizations and computing sciences                                                     |
| PLO 4                                                                                                                                                                                                                                    | [C5] Students are able to work on a simple and clearly defined scientific task and explain the results, both written and verbally either on the area of pure mathematics or applied mathematics or computing sciences |
| PLO 5                                                                                                                                                                                                                                    | [C3] Students are able to make use of the principles of long life learning to improve knowledge and current issues on mathematics                                                                                     |
| <b>Course Learning Outcome</b>                                                                                                                                                                                                           |                                                                                                                                                                                                                       |
| 1. Students are able to study new topics about analysis and algebra<br>2. Students are able to understand and relay material from paper / related papers in the form of presentation                                                     |                                                                                                                                                                                                                       |

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| <b>Main Subject</b>                                                                                     |
| Materials on new topics of analysis and algebra, paper / analysis and algebra papers on related topics. |
| <b>Prerequisites</b>                                                                                    |
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| <b>Reference</b>                                                                                        |
| 1. Books and papers for related topics                                                                  |
| <b>Supporting Reference</b>                                                                             |
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