

**UNDERGRADUATE PROGRAM IN COMPUTER SCIENCE
DEPARTMENT OF COMPUTER SCIENCE AND ELECTRONICS
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
UNIVERSITAS GADJAH MADA**

| | |
|---|--|
| Module name | Undergraduate Thesis |
| Module level | Undergraduate |
| Code | MII-4002 |
| Courses (if applicable) | Undergraduate Thesis |
| Semester | Even |
| Contact person | Undergraduate Thesis Advisor |
| Lecturer | Undergraduate Thesis Advisor |
| Language | Bahasa Indonesia and English |
| Relation to curriculum | <ol style="list-style-type: none"> 1. Undergraduate degree program, compulsory, 8th semester. 2. International undergraduate program, compulsory, 8th semester. |
| Type of teaching, contact hours | <ol style="list-style-type: none"> 1. Undergraduate degree program: consultations and presentations, (< 10 students), at least once a week. 2. International undergraduate program: consultations and presentations, (< 10 students), at least once a week. |
| Workload | <ol style="list-style-type: none"> 1. Consultation and presentation: 2 x 50 = 100 minutes per week. 2. Coding and Testing (experiments): 1 x 60 = 60 minutes (1 hours) per week. 3. Private study (writing): 1 x 60 = 60 minutes (1 hours) per week. |
| Credit points | 4 (four). |
| Requirements according to the examination regulations | A student must have met his/her advisor at least 75% of the entire semester. |
| Recommended prerequisites | MII4001-Undergraduate thesis proposal can be taken at the same time. |
| Learning outcomes and their corresponding PLOs | <p>After completing this module, a student is expected to:</p> <p>CO1 capable of determining the main objective and research contribution (i.e., improve a computation method or an algorithm, produce a computational / mathematical model, implement a computational model, and develop a program / prototype) clearly. PLO9</p> |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|------|---|------|-----|--|------|-----|--|------|-----|--|------|-----|---|------|-----|--|------|-----|---|------|-----|---------------------------------|------|
| | <table border="1"> <tbody> <tr> <td>CO2</td> <td>capable of formulating research questions clearly based on the relevant background (showing with the use of relevant literatures for references).</td> <td>PLO5</td> </tr> <tr> <td>CO3</td> <td>capable of writing the step-by-step of research plans that match with research methodology, and an appropriate testing plan.</td> <td>PLO6</td> </tr> <tr> <td>CO4</td> <td>capable of describing the research results in detail together with comprehensive discussion.</td> <td>PLO6</td> </tr> <tr> <td>CO5</td> <td>capable of formulating conclusions and suggestions for future works appropriately and correctly.</td> <td>PLO9</td> </tr> <tr> <td>CO6</td> <td>capable of showing initiatives and motivation, working independently, having academic ethics, and interacting well.</td> <td>PLO6</td> </tr> <tr> <td>CO7</td> <td>capable of presenting the research results effectively, self confidently, interestingly, orderly, clearly, and easy to understand.</td> <td>PLO8</td> </tr> <tr> <td>CO8</td> <td>capable of writing undergraduate thesis manuscript using Bahasa Indonesia / English grammar and spelling correctly, and proposal that meets writing guides of undergraduate thesis.</td> <td>PLO8</td> </tr> </tbody> </table> | CO2 | capable of formulating research questions clearly based on the relevant background (showing with the use of relevant literatures for references). | PLO5 | CO3 | capable of writing the step-by-step of research plans that match with research methodology, and an appropriate testing plan. | PLO6 | CO4 | capable of describing the research results in detail together with comprehensive discussion. | PLO6 | CO5 | capable of formulating conclusions and suggestions for future works appropriately and correctly. | PLO9 | CO6 | capable of showing initiatives and motivation, working independently, having academic ethics, and interacting well. | PLO6 | CO7 | capable of presenting the research results effectively, self confidently, interestingly, orderly, clearly, and easy to understand. | PLO8 | CO8 | capable of writing undergraduate thesis manuscript using Bahasa Indonesia / English grammar and spelling correctly, and proposal that meets writing guides of undergraduate thesis. | PLO8 | | | |
| CO2 | capable of formulating research questions clearly based on the relevant background (showing with the use of relevant literatures for references). | PLO5 | | | | | | | | | | | | | | | | | | | | | | | |
| CO3 | capable of writing the step-by-step of research plans that match with research methodology, and an appropriate testing plan. | PLO6 | | | | | | | | | | | | | | | | | | | | | | | |
| CO4 | capable of describing the research results in detail together with comprehensive discussion. | PLO6 | | | | | | | | | | | | | | | | | | | | | | | |
| CO5 | capable of formulating conclusions and suggestions for future works appropriately and correctly. | PLO9 | | | | | | | | | | | | | | | | | | | | | | | |
| CO6 | capable of showing initiatives and motivation, working independently, having academic ethics, and interacting well. | PLO6 | | | | | | | | | | | | | | | | | | | | | | | |
| CO7 | capable of presenting the research results effectively, self confidently, interestingly, orderly, clearly, and easy to understand. | PLO8 | | | | | | | | | | | | | | | | | | | | | | | |
| CO8 | capable of writing undergraduate thesis manuscript using Bahasa Indonesia / English grammar and spelling correctly, and proposal that meets writing guides of undergraduate thesis. | PLO8 | | | | | | | | | | | | | | | | | | | | | | | |
| Content | This module (undergraduate proposal thesis) contains seven parts: contribution, relevance, methodology, results and discussions, conclusions and suggestions, research topics mastering, presentation, and writing. | | | | | | | | | | | | | | | | | | | | | | | | |
| Study and examination requirements and forms of examination | Final report (undergraduate thesis manuscript), and Examination (presentation). | | | | | | | | | | | | | | | | | | | | | | | | |
| Media employed | LCD and computers | | | | | | | | | | | | | | | | | | | | | | | | |
| Assessments and Evaluation | <table border="1"> <tbody> <tr> <td>CO1</td> <td>Examination (presentation, Q/A)</td> <td>8 %</td> </tr> <tr> <td>CO2</td> <td>Examination (presentation, Q/A)</td> <td>20 %</td> </tr> <tr> <td>CO3</td> <td>Examination (presentation, Q/A)</td> <td>16 %</td> </tr> <tr> <td>CO4</td> <td>Examination (presentation, Q/A)</td> <td>24 %</td> </tr> <tr> <td>CO5</td> <td>Examination (presentation, Q/A)</td> <td>8 %</td> </tr> <tr> <td>CO6</td> <td>Examination (presentation, Q/A)</td> <td>20 %</td> </tr> <tr> <td>CO7</td> <td>Examination (presentation, Q/A)</td> <td>4 %</td> </tr> <tr> <td>CO8</td> <td>Examination (presentation, Q/A)</td> <td>12 %</td> </tr> </tbody> </table> | CO1 | Examination (presentation, Q/A) | 8 % | CO2 | Examination (presentation, Q/A) | 20 % | CO3 | Examination (presentation, Q/A) | 16 % | CO4 | Examination (presentation, Q/A) | 24 % | CO5 | Examination (presentation, Q/A) | 8 % | CO6 | Examination (presentation, Q/A) | 20 % | CO7 | Examination (presentation, Q/A) | 4 % | CO8 | Examination (presentation, Q/A) | 12 % |
| CO1 | Examination (presentation, Q/A) | 8 % | | | | | | | | | | | | | | | | | | | | | | | |
| CO2 | Examination (presentation, Q/A) | 20 % | | | | | | | | | | | | | | | | | | | | | | | |
| CO3 | Examination (presentation, Q/A) | 16 % | | | | | | | | | | | | | | | | | | | | | | | |
| CO4 | Examination (presentation, Q/A) | 24 % | | | | | | | | | | | | | | | | | | | | | | | |
| CO5 | Examination (presentation, Q/A) | 8 % | | | | | | | | | | | | | | | | | | | | | | | |
| CO6 | Examination (presentation, Q/A) | 20 % | | | | | | | | | | | | | | | | | | | | | | | |
| CO7 | Examination (presentation, Q/A) | 4 % | | | | | | | | | | | | | | | | | | | | | | | |
| CO8 | Examination (presentation, Q/A) | 12 % | | | | | | | | | | | | | | | | | | | | | | | |
| Reading List | Relevance papers and journals, and related textbooks. | | | | | | | | | | | | | | | | | | | | | | | | |