



# UNIVERSITAS GADJAH MADA

Faculty of Mathematics and Natural Sciences

Department of Mathematics

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## Doctor in Mathematics

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## MODULE HANDBOOK

Module Name	<i>Capita Selecta in Advanced Computational Mathematics</i>
Module level, if applicable	
Code, if applicable	<i>MMM 7604</i>
Subtitle, if applicable	
Courses, if applicable	<i>Capita Selecta in Advanced Computational Mathematics</i>
Semester(s) in which the module is taught	
Person responsible for the module	<i>Prof. Imam Solekhuudin, M.Si., Ph.D.</i>
Lecturer(s)	<i>Prof. Imam Solekhuudin, M.Si., Ph.D., Dr. Sumardi, M.Si</i>
Language	<i>Bahasa Indonesia</i>
Relation to curriculum	<i>elective</i>
Teaching methods	<i>lecture, project, seminar</i>
Workload (incl. contact hours, self-study hours)	<ul style="list-style-type: none"><li>• <i>3x50 minutes lectures,</i></li><li>• <i>3x50 minutes structured activities,</i></li><li>• <i>3x50 minutes individual study,</i></li><li>• <i>In 16 weeks per semester (including mid-term and final examinations).</i></li></ul> <i>Total: 144x50 minutes per semester</i>
Credit points	<i>3</i>
Required and recommended prerequisites for joining the module	

Module objectives/intended learning outcomes	<p><i>After completing this course, the students should have able to:</i></p> <ul style="list-style-type: none"> <li>• <i>CO 1 evaluate latest journal papers in computational mathematics, and attempt to develop the method or combine several methods.</i></li> <li>• <i>CO 2 carry out research in computational mathematics related to the papers read.</i></li> </ul>																																		
Content	<p><i>In this course, students have to do activities under Lecture's supervision. Academic activities including literature study to master one or more concepts from many research areas which related to computational mathematics.</i></p>																																		
Examination forms	<p><i>oral presentation, essay.</i></p>																																		
Study and examination requirements	<p><i>To pass this course, students must obtain a minimum grade of D. The final mark will be weighted as follows:</i></p> <table border="1"> <thead> <tr> <th>No</th> <th>Assessment method</th> <th>Weight</th> <th>Cognitive</th> <th>Project/Case base</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Final Examination</td> <td>30</td> <td>12</td> <td>18</td> </tr> <tr> <td>2.</td> <td>Mid-Term Examination</td> <td>30</td> <td>18</td> <td>12</td> </tr> <tr> <td>3.</td> <td>Laboratory</td> <td>25</td> <td></td> <td>25</td> </tr> <tr> <td>4.</td> <td>Quiz, Homework</td> <td>15</td> <td>10</td> <td>5</td> </tr> <tr> <td></td> <td><b>TOTAL</b></td> <td><b>100</b></td> <td><b>40</b></td> <td><b>60</b></td> </tr> </tbody> </table>					No	Assessment method	Weight	Cognitive	Project/Case base	1.	Final Examination	30	12	18	2.	Mid-Term Examination	30	18	12	3.	Laboratory	25		25	4.	Quiz, Homework	15	10	5		<b>TOTAL</b>	<b>100</b>	<b>40</b>	<b>60</b>
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Media employed	<p><i>Board, LCD Projector, Laptop/ Computer</i></p>																																		
Reading list	<p><i>References will be presented before the class started</i></p>																																		

### CO-PLO Mapping

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6
CO 1	v	v	v		v	v
CO 2	v	v	v	v	v	v

Compilation Date :

Modified Date :