

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

Module name	<b>Computer Systems Interfaces</b>	
Module level	Undergraduate	
Code	MII-2604	
Courses (if applicable)	<b>Computer Systems Interfaces</b>	
Semester	Even	
Contact person	Drs. Abdul Ro'uf, M.Kom.	
Lecturer	Drs. Abdul Ro'uf, M.Kom. Triyogatama Wahyu Widodo, M.Kom.	
Language	Bahasa Indonesia	
Relation to curriculum	Undergraduate degree program, mandatory, 4 <sup>th</sup> semester	
Type of teaching, contact hours	Lectures, < 60 students, 2 hours	
Workload	<ol style="list-style-type: none"> <li>1. Lectures: 2 x 50 = 100 minutes (1 hour and 40 minutes) per week</li> <li>2. Exercises and Assignments: 2 x 50 = 100 minutes (1 hour and 40 minutes) per week</li> <li>3. Private study: 2 x 60 = 120 minutes (2 hours) per week</li> </ol>	
Credit points	2 credit points (sks)	
Requirements according to the examination regulations	A student must have attended at least 75% of the lectures to sit in the final exams.	
Mandatory prerequisites	MII 2061 Microprocessors	
Learning outcomes and their corresponding PLOs	<p>After completing this module, a student is expected to:</p> <p>CO-1 Comprehend the specifications and characteristics of Intel 80x86 microprocessors family along with their supporting chips</p> <p>CO-2 Able to apply the interfacing methods between the microprocessor and its supporting chips in designing a subsystem of computer systems</p> <p>CO-3 Be able to solve problems, primarily the design, in the field of computer systems by utilizing the interfacing methods</p>	<p>PLO2</p> <p>PLO3</p> <p>PLO4</p>
Content	Microprocessors, for they could work well, need supporting chips. Microprocessors and its supporting chips should be able to communicate. Communication is done by using available interface on each chip. This course is a continuation of the Microprocessors course which focuses on the aspect of the hardware (chips) in the microcomputer systems and how those chips are communicating.	
Study and examination requirements and	<ul style="list-style-type: none"> <li>• Quizzes (2)</li> <li>• Assignments (2)</li> </ul>	

forms of examination	<ul style="list-style-type: none"> <li>• Mid-term examination</li> <li>• Final examination</li> </ul>
Media employed	LCD, whiteboard, websites (eLisa).
Assessments and Evaluation	CO-1 Midterm exam, final exam, quiz (total: 50%) CO-2 Midterm exam, assignment, final exam (total: 28,5%) CO-3 Midterm exam, final exam, assignment (total: 21,5%)
Reading List	Barry B. Brey, 2008, "Intel Microprocessors", 8 <sup>th</sup> ed., Pearson Education Mazidi, M.A., 2003, "The 80x86 IBM PC & Compatible Computers Vol. 1& II", 4 <sup>th</sup> ed., Prentice Hall International Inc., New Jersey, USA. Kip R. Irvine, 2010, "Assembly Language for x86 Processors", 6 <sup>th</sup> ed., Prentice Hall