<table>
<tr><td>Module designation</td><td>Foundations of Mathematics
Indonesian title: Dasar-Dasar Matematika
Course code: 8420203043</td></tr>
<tr><td>Semester(s) in which the module is taught</td><td>Semester 1 (First year)</td></tr>
<tr><td>Person responsible for the module</td><td>Coordinator: Prof. Dr. Masriyah, M.Pd
Teaching staff: Prof. Dr. Tatag Yuli Eko Siswono., M.Pd.; Nina Rinda Prihartiwi., M.Pd.; Dr. Ali Shodikin., M.Pd.</td></tr>
<tr><td>Language</td><td>Indonesian</td></tr>
<tr><td>Relation to curriculum</td><td>Compulsory</td></tr>
<tr><td>Teaching methods</td><td>Lectures, tutorial assignments, and individual study
Media and tools: Slides and LCD projectors, whiteboard</td></tr>
<tr><td>Workload (incl. contact hours, self-study hours)</td><td>(Estimated) total workload: 3 CU × 170 minutes × 16 weeks = 8,160 minutes = 136.00 hours (≈ 4.77 ECTS)
Contact hours: lectures, 3 × 50 minutes per week × 16 weeks = 40.00 hours (class hours per week: 510 minutes = 8.50 hours, including structured activities)
Private study including examination preparation: structured assignments, 3 × 60 minutes per week × 16 weeks = 48.00 hours; independent study, 3 × 60 minutes per week × 16 weeks = 48.00 hours (total 96.00 hours)</td></tr>
<tr><td>Credit points</td><td>3 CU (4.77 ECTS)
1 CU = 170 minutes per week × 16 weeks = 45.3 hours; 1 ECTS = 28.48 hours (144 CU = 229 ECTS), so 1 CU = 1.59 ECTS (UNESA Rector's Decree No. 736/HK/KM/2023).</td></tr>
<tr><td>Required and recommended prerequisites for joining the module</td><td>None</td></tr>
<tr><td>Module objectives/intended learning outcomes</td><td>Programme learning outcomes (PLO) addressed:
PLO-5: Apply the basic principles of mathematics to solve simple mathematical problems.
PLO-6: Demonstrate mathematical knowledge and insight.</td></tr>
<tr><td>Content</td><td>Studying the characteristics of mathematics, its deductive- axiomatic system and structure, logical operations, quantifiers, reasoning processes, sets, relations, and functions, through active, case-based learning supported by ICT, using lecture, demonstration, questioning, and discussion methods.</td></tr>
<tr><td>Examination forms</td><td>Final score is calculated from the weekly assessment scheme below (CLO/PLO addressed and weight of each assessment):
<table>
<tr><th>Week</th><th>CLO</th><th>PLO</th><th>Weight (%)</th></tr>
<tr><td>1</td><td>CLO-1</td><td>PLO-6</td><td>5</td></tr>
<tr><td>2</td><td>CLO-2</td><td>PLO-5</td><td>5</td></tr>
<tr><td>3</td><td>CLO-2</td><td>PLO-5</td><td>3</td></tr>
<tr><td>4</td><td>CLO-3</td><td>PLO-5</td><td>10</td></tr>
<tr><td>5</td><td>CLO-4</td><td>PLO-5</td><td>5</td></tr>
<tr><td>6</td><td>CLO-4</td><td>PLO-5</td><td>5</td></tr>
<tr><td>7</td><td>CLO-5</td><td>PLO-6</td><td>10</td></tr>
<tr><td>8</td><td>CLO-6</td><td>PLO-6</td><td>5</td></tr>
</table></td></tr>
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	9 | CLO-6 | PLO-6 | 5 10 | CLO-6 | PLO-6 | 10 11 | CLO-7 | PLO-6 | 5 12 | CLO-7 | PLO-6 | 5 13 | CLO-7 | PLO-6 | 10 14 | CLO-10 | PLO-5 | 5 15 | CLO-8 | PLO-5 | 10 16 | CLO-9 | PLO-5 | 2
Study and examination requirements	Students are considered competent and pass if the final score is at least 55 or C. **Final index (grade conversion):** **Index** | **Converted score** | **Score range (A = final score)** A | 4.00 | 85 ≤ A ≤ 100 A- | 3.75 | 80 ≤ A < 85 B+ | 3.50 | 75 ≤ A < 80 B | 3.00 | 70 ≤ A < 75 B- | 2.75 | 65 ≤ A < 70 C+ | 2.50 | 60 ≤ A < 65 C | 2.00 | 55 ≤ A < 60 D | 1.00 | 40 ≤ A < 55 E | 0.00 | 0 ≤ A < 40
Reading list	1. Masriyah, 2017. Dasar- Dasar Matematika . Surabaya: Unipress Unesa. 2. Yunus, M. 2007. Logika: Suatu Pengantar . Yogyakarta: Graha Ilmu 3. Kunnen, K. 2007. The Foundations of Mathematics . 4. Stoll, R. R. 1979. Set Theory and Logic . New York: Dover Publication, Inc.