## **MODULE HANDBOOK**

| Module Name:                 | Visual Programming   |  |  |  |  |
|------------------------------|--|--|--|--|--|
| Module Level:                | Sarjana (S-1) / Bachelor   |  |  |  |  |
| Abbreviation, if             | 8420203152   |  |  |  |  |
| applicable:                  |  |  |  |  |  |
| Sub-heading, if              | -  |  |  |  |  |
| applicable:                  |  |  |  |  |  |
| Course included in the       | -  |  |  |  |  |
| module, if applicable:       |  |  |  |  |  |
| Semester/term:               | 4/ Third year  |  |  |  |  |
| Module Coordinator(s):       | Dra. Atik Wintarti, M.Kom.   |  |  |  |  |
| Lecturer(s):                 | Dr. Elly Matul Imah, M.Kom.  |  |  |  |  |
|                              | Dra. Atik Wintarti, M.Kom.   |  |  |  |  |
|                              | Shofa Fiangga, M. Pd.  |  |  |  |  |
| Language:                    | Indonesia  |  |  |  |  |
| Classification within        | Compulsory course/ elective studies  |  |  |  |  |
| the curriculum:              |  |  |  |  |  |
| <b>Teaching format/class</b> | Teaching format: lectures, tutorial assignment, and individual                   |  |  |  |  |
| hours per week during        | study. $3 \times 170$ minutes = $510$ minutes = $8.5$ hours lectures             |  |  |  |  |
| the semester                 |  |  |  |  |  |
| Workload:                    | 15 weeks per semester consisting of:   |  |  |  |  |
|                              | > 2.5 hours lectures (3 x 50 minutes) per week,                                  |  |  |  |  |
|                              | > 3 hours tutorial assignments (3 x 60 minutes) per week,                        |  |  |  |  |
|                              | ➤ 3 hours individual study (3 x 60 minutes) per week,                            |  |  |  |  |
|                              | Total workload : 14x3x170 minutes = 7,140 minutes = 4.76 ECTS*                   |  |  |  |  |
| Credit Point:                | 3  |  |  |  |  |
| Requirements:                | Elementary Linear Algebra  |  |  |  |  |
| Learning Goals:              | CLO-1 Understand the concept of visual programming and its supporting technology |  |  |  |  |
|                              | CLO-2 Design mathematics learning media using ICT                                |  |  |  |  |
|                              | CLO-3 Make application programs for learning mathematics                         |  |  |  |  |
|                              | CLO-4 Complete assignments and evaluate them                                     |  |  |  |  |
| Content:                     | The basic concepts of a visual programming language in making                    |  |  |  |  |
|                              | relevant applications for learning mathematics, application of data              |  |  |  |  |
|                              | structures and algorithms that include linked-lists, stacks, queues,             |  |  |  |  |
|                              | trees, searching and sorting to solve mathematical problems                      |  |  |  |  |

|                            | through active IT-assisted learning which ends in application development project tasks for learning mathematics.   |       |                 |                           |  |  |
|----------------------------|---|-------|-----------------|---------------------------|--|--|
| Study/exam<br>achievements | <ul> <li>Students are considered competent and pass if the final score calculated from the score of midterm exam, assignments, participation, and final exam is at least 55 or C.</li> <li>Final score is calculated as follows:</li> <li>20% midterm exam + 30% assignments + 20% participation + 30% final exam</li> <li>Final index is defined as follow:</li> </ul> |       |                 |                           |  |  |
|                            |   | Index | Converted Score | Score Range               |  |  |
|                            |   | A     | 4.00            | 85≤A≤100                  |  |  |
|                            |   | A-    | 3.75            | 80≤ <i>A</i> − <85        |  |  |
|                            |   | B+    | 3.50            | <b>75≤</b> <i>B</i> + <80 |  |  |
|                            |   | В     | 3.00            | <b>70</b> ≤ <i>B</i> <75  |  |  |
|                            |   | B-    | 2.75            | 65≤ <i>B</i> − <70        |  |  |
|                            |   | C+    | 2.50            | 60≤ <i>C</i> +<65         |  |  |
|                            |   | С     | 2.00            | <b>55≤</b> <i>C</i> <60   |  |  |
|                            |   | D     | 1.00            | <b>40</b> ≤ <i>D</i> <55  |  |  |
|                            |   | Е     | 0.00            | $0 \leq E < 40$           |  |  |
| Forms of Media             | Slides and LCD projectors, whiteboard   |       |                 |                           |  |  |
| Literature                 | <ol> <li>Grundgeiger, D. 2002. Programming Visual Basic.NET.<br/>O'Reilly, penerbit, kota.</li> <li>Haggard, G.,Hutchison, W., and Shibata, C.2013.Introduction:<br/>Visual Basic 6.0. penerbit, kota</li> </ol>  |       |                 |                           |  |  |
| Note                       | *Total hours per 1 credit in 1 semester={(1 credit x 170 minutes x 14 weeks)/60 minutes}=39,67 hours.<br>Each ECTS equals with 25 hours therefore 1 credit in 1 semester equals 1,59 ECTS.  |       |                 |                           |  |  |