



## OLD Study plan of the Bachelor of Science in Mathematics Program (Number of program hours = 126)

### First Year

| First level  |                                     |           |           | Second level |                                         |           |            |
|--------------|-------------------------------------|-----------|-----------|--------------|-----------------------------------------|-----------|------------|
| Code         | Course Name                         | Hr        | Requisite | Code         | Course Name                             | Hr        | Requisite  |
| 011ENG-6     | Intensive English Program 1         | 6         | ----      | 101CS-2      | Computer Science                        | 3         | ----       |
| 101BIOL-4    | General Biology                     | 4         | ----      | 101 PHYS-4   | Introduction to Physics                 | 4         | ----       |
| 101MATH-3    | <a href="#">Calculus -1</a>         | 3         | ----      | 101CHEM-4    | General Chemistry-1                     | 4         | ----       |
| 111 ICI-2    | The Entrance to the Islamic Culture | 2         | ----      | 110NGL-3     | Scientific English for Science Students | 3         | 011ENG-6-S |
| <b>Total</b> |                                     | <b>15</b> |           | 112ICI-2     | Islamic Cluture-2                       | 2         | ----       |
|              |                                     |           |           | 201ARAB-2    | Arabic Language Skills                  | 2         | ----       |
| <b>Total</b> |                                     | <b>15</b> |           | <b>Total</b> |                                         | <b>18</b> |            |

### Second Year

| Third level  |                                                           |           |             | Forth level  |                                                        |           |             |
|--------------|-----------------------------------------------------------|-----------|-------------|--------------|--------------------------------------------------------|-----------|-------------|
| Code         | Course Name                                               | Hr        | Requisite   | Code         | Course Name                                            | Hr        | Requisite   |
| CS102-3      | Computation Skills 2                                      | 2         | ----        | 114ICI-2     | Islamic Culutre-4                                      | 2         | ----        |
| 113ICI-2     | Islamic Culutre-3                                         | 2         | ----        | 203MATH-3    | <a href="#">Calculus 3</a>                             | 3         | 202MATH-3-S |
| 202MATH-3    | <a href="#">Calculus 2</a>                                | 3         | 101MATH-3-S | 212STAT-3    | <a href="#">Mathematical Statistics</a>                | 3         | 211MATH-3-S |
| 202ARAB-2    | Arabic Editing                                            | 2         | ----        | 242MATH-3    | <a href="#">Linear Algebra 1</a>                       | 3         | 232MATH-3-S |
| 211MATH-3    | <a href="#">Principle of Statistics &amp; Probability</a> | 3         | ----        | 251MATH-2    | <a href="#">Programming for Mathematics</a>            | 2         | CS102-3-S   |
| 232MATH-3    | <a href="#">Foundations of Mathematics</a>                | 3         | 101MATH-3-S | 263MATH-3    | <a href="#">Introduction to Differential Equations</a> | 3         | 202MATH-3-S |
| <b>Total</b> |                                                           | <b>15</b> |             | <b>Total</b> |                                                        | <b>16</b> |             |

### Third Year

| Fifth level  |                                     |    |                            | Sixth level  |                                      |    |                            |
|--------------|-------------------------------------|----|----------------------------|--------------|--------------------------------------|----|----------------------------|
| Code         | Course Name                         | Hr | Requisite                  | Code         | Course Name                          | Hr | Requisite                  |
| 304MATH-3    | <a href="#">Vector Analysis</a>     | 3  | 203MATH-3-S                | 313STAT-3    | <a href="#">Probability Theory 1</a> | 3  | 211MATH-3-S<br>203MATH-3-S |
| 322MATH-3    | <a href="#">Real Analysis 1</a>     | 3  | 203MATH-3-S                | 323MATH-3    | <a href="#">Real Analysis 2</a>      | 3  | 322MATH-3-S                |
| 343MATH-3    | <a href="#">Linear Algebra 2</a>    | 3  | 242MATH-3-S                | 345MATH-3    | <a href="#">Group Theory</a>         | 3  | 232MATH-3-S<br>344MATH-3-S |
| 344MATH-3    | <a href="#">Number Theory</a>       | 3  | 232MATH-3-S<br>242MATH-3-S | 352MATH-3    | <a href="#">Numerical Analysis</a>   | 3  | 242MATH-3-S<br>263MATH-3-S |
| 361MATH-3    | <a href="#">Applied Mathematics</a> | 3  | 202MATH-3-S                | 363MATH-2    | <a href="#">Mathematical Methods</a> | 3  | 263MATH-3-S<br>343MATH-3-S |
| <b>Total</b> |                                     |    | <b>15</b>                  | <b>Total</b> |                                      |    | <b>15</b>                  |

### Forth Year

| Seventh level |                                                  |    |                                                          | Eighth level |                                                              |    |                            |
|---------------|--------------------------------------------------|----|----------------------------------------------------------|--------------|--------------------------------------------------------------|----|----------------------------|
| Code          | Course Name                                      | Hr | Requisite                                                | Code         | Course Name                                                  | Hr | Requisite                  |
| 423MATH-3     | <a href="#">Functions of Complex Variables</a>   | 3  | 203MATH-3-S<br>322MATH-3-S                               | 414STAT-3    | <a href="#">Probability Theory 2</a>                         | 3  | 323MATH-3-S<br>313STAT-3-S |
| 445MATH-3     | <a href="#">Rings and Fields</a>                 | 3  | 345MATH-3-S                                              | 424MATH-3    | <a href="#">Analysis in Several Variables</a>                | 3  | 323MATH-3-S                |
| 464MATH-3     | <a href="#">Theory of Differential Equations</a> | 3  | 263MATH-3-S<br>343MATH-3-S                               | 432MATH-3    | <a href="#">Introduction to Graph Theory and Combinatory</a> | 3  | 344MATH-3-S                |
| 481MATH-3     | <a href="#">Introduction to Topology</a>         | 3  | 322MATH-3-S                                              | 453MATH-3    | <a href="#">Mathematical Programming</a>                     | 3  | 203MATH-3-S                |
| 490MATH-3     | <a href="#">Special Topics</a>                   | 2  | 322MATH-3-S                                              | 472MATH-3    | <a href="#">Differential Geometry</a>                        | 3  | 203MATH-3-S<br>363MATH-3-S |
| 491MATH-3     | <a href="#">Research Project</a>                 | 3  | 313MATH-3-S<br>322MATH-3-S<br>345MATH-3-S<br>363MATH-3-S | <b>Total</b> |                                                              |    | <b>15</b>                  |
| <b>Total</b>  |                                                  |    | <b>17</b>                                                |              |                                                              |    |                            |