

## BACHELOR OF INFORMATION TECHNOLOGY

Tracks:

1. Database Systems
  2. Network Systems
- List of Courses by Semester

BOR Resolution No.\_\_\_\_, Series of 2018

### First Year, First Semester

| Course No. | Course Title                         | Units          | Hrs/Week  |          |                | Prerequisite(s) |
|------------|--------------------------------------|----------------|-----------|----------|----------------|-----------------|
|            |                                      |                | Lec       | Lab      | Total          |                 |
| GEC101     | Understanding the Self               | 3              | 3         | 0        | 3              | None            |
| GEC102     | Purposive Communication              | 3              | 3         | 0        | 3              | None            |
| MAT104     | Discrete Structures                  | 3              | 3         | 0        | 3              | None            |
| GEC104     | Mathematics in the Modern World      | 3              | 3         | 0        | 3              | None            |
| CCC100     | Fundamentals of Computing            | 3              | 3         | 0        | 3              | None            |
| CCC101     | Computer Programming 1               | 3              | 2         | 3        | 5              | None            |
| PED001     | Exercise Prescription and Management | 2              | 2         | 0        | 2              | None            |
| NST001     | National Service Training Program 1  | (3)            | 0         | 0        | (3)            | None            |
|            | <b>Total</b>                         | <b>20/(23)</b> | <b>19</b> | <b>3</b> | <b>22/(25)</b> |                 |

### First Year, Second Semester

| Course No. | Course Title                        | Units          | Hrs/Week  |          |                | Prerequisite(s) |
|------------|-------------------------------------|----------------|-----------|----------|----------------|-----------------|
|            |                                     |                | Lec       | Lab      | Total          |                 |
| GEC103     | The Contemporary World              | 3              | 3         | 0        | 3              | None            |
| GEC105     | Readings in Philippine History      | 3              | 3         | 0        | 3              | None            |
| GEC106     | Art Appreciation                    | 3              | 3         | 0        | 3              | None            |
| FPE101     | Fundamentals of Peace Education     | 3              | 3         | 0        | 3              | None            |
| MAT051     | Calculus 1                          | 5              | 5         | 0        | 5              | None            |
| CCC102     | Computer Programming 2              | 3              | 2         | 3        | 5              | CCC101          |
| PED002     | Dance/Martial Arts                  | 2              | 2         | 0        | 2              | PED001          |
| NST002     | National Service Training Program 2 | (3)            | 0         | 0        | (3)            | NST001          |
|            | <b>Total</b>                        | <b>22/(25)</b> | <b>21</b> | <b>3</b> | <b>24/(27)</b> |                 |

**Second Year, First Semester**

| Course No.   | Course Title  | Units     | Hrs/Week  |          |           | Prerequisite(s) |
|--------------|---|-----------|-----------|----------|-----------|-----------------|
|              |   |           | Lec       | Lab      | Total     |                 |
| GEC107       | Ethics  | 3         | 3         | 0        | 3         | None            |
| GEC108       | Science, Technology and Society                       | 3         | 3         | 0        | 3         | None            |
| Lang Elect   | Foreign Language                                      | 3         | 3         | 0        | 3         | None            |
| MAT061       | Calculus 2  | 5         | 5         | 0        | 5         | MAT051          |
| CCC121       | Data Structures and Algorithms                        | 3         | 2         | 3        | 5         | CCC102          |
| ITE131       | Computer Architecture and Operating Systems           | 3         | 3         | 0        | 3         | None            |
| PED003       | Individual/Dual Sports/Traditional/Recreational Games | 2         | 2         | 0        | 2         | PED001          |
| <b>Total</b> |   | <b>22</b> | <b>21</b> | <b>3</b> | <b>24</b> |                 |

**Second Year, Second Semester**

| Course No.           | Course Title  | Units     | Hrs/Week  |           |           | Prerequisite(s) |
|----------------------|---|-----------|-----------|-----------|-----------|-----------------|
|                      |   |           | Lec       | Lab       | Total     |                 |
| GEC109               | Life and Works of Rizal   | 3         | 3         | 0         | 3         | None            |
| ITE122*/<br>ITE114** | Algorithmic Graph Theory*/ Numerical Linear Algebra and Matrix Theory** | 3         | 2         | 3         | 5         | MAT104 & CCC101 |
| STT071               | Probability and Statistical Inference for Computing Systems             | 2         | 2         | 0         | 2         | CCC102          |
| STT071.1             | Probability and Statistical Inference for Computing Systems (Lab)       | 1         | 0         | 3         | 3         | CCC102          |
| ITE125               | Introduction to Human Computer Interaction                              | 3         | 2         | 3         | 5         | CCC102          |
| ITE132               | Fundamentals of Computer Networks                                       | 3         | 2         | 3         | 5         | ITE131          |
| CCC151               | Information Management  | 3         | 2         | 3         | 5         | CCC121          |
| PED004               | Team Sports   | 2         | 2         | 0         | 2         | PED001          |
| <b>Total</b>         |   | <b>20</b> | <b>15</b> | <b>15</b> | <b>30</b> |                 |

### Third Year, First Semester

| Course No.           | Course Title   | Units     | Hrs/Week  |           |           | Prerequisite(s)      |
|----------------------|--|-----------|-----------|-----------|-----------|----------------------|
|                      |  |           | Lec       | Lab       | Total     |                      |
| HIS003               | History of Filipino Muslims and the Indigenous People of MINSUPALA | 3         | 3         | 0         | 3         | None                 |
| FIL101               | Wika at Kultura sa Mapayapang Lipunan                              | 3         | 3         | 0         | 3         | None                 |
| ITE133*/<br>ITE152** | Advance Computer Networks*/ Advance Databases**                    | 3         | 2         | 3         | 5         | ITE132*/<br>CCC151** |
| ISY108               | Requirements Engineering   | 3         | 2         | 3         | 5         | CCC151               |
| CCC181               | Application Development and Emerging Technologies                  | 3         | 2         | 3         | 5         | CCC151               |
| ITE191/<br>ITE198    | CAPSTONE 1/ Research Methods                                       | 3         | 3         | 0         | 3         | ITE132/<br>CCC151    |
| Tech Elect 1         | Technical Elective 1   | 3         | 2         | 3         | 5         | ITE132/<br>CCC151    |
| <b>Total</b>         |  | <b>21</b> | <b>17</b> | <b>12</b> | <b>29</b> |                      |

### Third Year, Second Semester

| Course No.        | Course Title   | Units     | Hrs/Week  |          |           | Prerequisite(s)      |
|-------------------|--|-----------|-----------|----------|-----------|----------------------|
|                   |  |           | Lec       | Lab      | Total     |                      |
| FIL102            | Ekokritisismo at Pagpahalaga sa Kalikasan                  | 3         | 3         | 0        | 3         | None                 |
| ITE153            | Introduction to Artificial Intelligence and Expert Systems | 3         | 2         | 3        | 5         | CCC121               |
| ITE182            | Systems Integration, Administration and Maintenance        | 3         | 3         | 0        | 3         | CCC151               |
| ITE193            | Special Topics in IT                                       | 3         | 3         | 0        | 3         | ITE133*/<br>ITE152** |
| ITE192/<br>ITE199 | CAPSTONE 2/ Undergraduate Thesis                           | 3         | 3         | 0        | 3         | ITE191/ ITE198       |
| Tech Elect 2      | Technical Elective 2                                       | 3         | 2         | 3        | 5         | ITE132/<br>CCC151    |
| Tech Elect 3      | Technical Elective 3                                       | 3         | 2         | 3        | 5         | ITE132/<br>CCC151    |
| <b>Total</b>      |  | <b>21</b> | <b>18</b> | <b>9</b> | <b>27</b> |                      |

**Fourth Year, First Semester**

| Course No.   | Course Title   | Units     | Hrs/Week  |          |           | Prerequisite(s)      |
|--------------|--|-----------|-----------|----------|-----------|----------------------|
|              |  |           | Lec       | Lab      | Total     |                      |
| ENT101       | Startup Essentials: Fundamentals of Innovation-driven Entrepreneurship | 3         | 3         | 0        | 3         | None                 |
| ITE183       | Web Systems and Technologies   | 3         | 2         | 3        | 5         | CCC181               |
| ITE184       | Social, Legal and Professional Issues in Computing                     | 3         | 3         | 0        | 3         | GEC107               |
| ITE185       | Information Assurance and Security                                     | 3         | 3         | 0        | 3         | CCC151               |
| Tech Elect 4 | Technical Elective 4   | 3         | 2         | 3        | 5         | ITE132*/<br>CCC151** |
| Tech Elect 5 | Technical Elective 5   | 3         | 2         | 3        | 5         | ITE132*/<br>CCC151** |
| <b>Total</b> |  | <b>18</b> | <b>15</b> | <b>9</b> | <b>24</b> |                      |

**Fourth Year, Second Semester**

| Course No.   | Course Title        | Units    | Hrs/Week |           |           | Prerequisite(s) |
|--------------|---------------------|----------|----------|-----------|-----------|-----------------|
|              |                     |          | Lec      | Lab       | Total     |                 |
| ITE197       | On-the-Job Training | 6        | 0        | 40        | 40        | ITE192/ ITE199  |
| <b>Total</b> |                     | <b>6</b> | <b>0</b> | <b>40</b> | <b>40</b> |                 |

Legend: \* Network Track

\*\* Database Track

**Grand Total 150 (156) units**

| <b>Summary of Academic Units</b> |                  |
|----------------------------------|------------------|
| <b>First Year</b>                |                  |
| First Semester                   | <b>20 (23)</b>   |
| Second Semester                  | <b>22 (25)</b>   |
| <b>Second Year</b>               |                  |
| First Semester                   | <b>22</b>        |
| Second Semester                  | <b>20</b>        |
| <b>Third Year</b>                |                  |
| First Semester                   | <b>21</b>        |
| Second Semester                  | <b>21</b>        |
| <b>Fourth Year</b>               |                  |
| First Semester                   | <b>18</b>        |
| Second Semester                  | <b>6</b>         |
| <b>TOTAL</b>                     | <b>150 (156)</b> |

## LIST OF SUBJECTS COMMON TO THE ITE PROGRAMS

(In compliance to CHED Memo Order No. 25 Series of 2015)

| Course No. | Course Title                                      | Units     | Hrs/Week  |           |           | Prerequisite(s) |
|------------|---|-----------|-----------|-----------|-----------|-----------------|
|            |   |           | Lec       | Lab       | Total     |                 |
| CCC100     | Fundamentals of Computing                         | 3         | 3         | 0         | 3         | None            |
| CCC101     | Computer Programming 1                            | 3         | 2         | 3         | 5         | None            |
| CCC102     | Computer Programming 2                            | 3         | 2         | 3         | 5         | CCC101          |
| CCC121     | Data Structures and Algorithms                    | 3         | 2         | 3         | 5         | CCC102          |
| CCC151     | Information Management                            | 3         | 2         | 3         | 5         | CCC121          |
| CCC181     | Application Development and Emerging Technologies | 3         | 2         | 3         | 5         | CCC151          |
|            | <b>Total</b>                                      | <b>18</b> | <b>13</b> | <b>15</b> | <b>28</b> |                 |

### OPTION A: DATABASE SYSTEMS TRACK

#### Technical Electives: (15 Units Required)

|        |  |
|--------|--|
| ITD100 | Data Warehousing and Data Mining       |
| ITD101 | Distributed Databases                  |
| ITD102 | R Programming Language                 |
| ITD103 | Modern Query Languages                 |
| ITD104 | Database Security, Admin & Management  |
| ITD105 | Big Data Analytics                     |
| ITD106 | Lexical Databases                      |
| ITD107 | Information Assurance                  |
| ITD108 | Information Engineering                |
| ITD109 | Knowledge Based Systems                |
| ITD110 | NoSQL Databases                        |
| ITD111 | Business Intelligence                  |
| ITD112 | Data Visualization Techniques          |
| ITD113 | Applied Linear Models                  |
| ITD114 | Software Quality Assurance and Metrics |
| ITD115 | Platform Technologies                  |

### OPTION B: NETWORK SYSTEMS TRACK

#### Technical Electives: (15 Units required)

|        |   |
|--------|---|
| ITN100 | Network Systems Programming               |
| ITN101 | Switching and Routing                     |
| ITN102 | Network Security                          |
| ITN103 | Network Management                        |
| ITN104 | Enterprise Networking                     |
| ITN105 | Wireless and Mobile Computing             |
| ITN106 | VoIP Technology                           |
| ITN107 | Advance Operating System                  |
| ITN108 | Introduction to Cryptography              |
| ITN109 | Introduction to Optic Networks            |
| ITN110 | Introduction to Computer Forensics        |
| ITN111 | Information Security                      |
| ITN112 | Network Planning and Management           |
| ITN113 | Computer Network Protocols                |
| ITN114 | Wireless Internet and Pervasive Computing |