Course Checklist

First Year - First Semester

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Course No. | | Descriptive Title | Lec | Lab | Units | Pre-  requisite | Co requisites |
|  | Theo 1 | I Believe | 3 |  | 3 | None |  |
|  | Engl 1 | Communication Arts I | 3 |  | 3 | None |  |
|  | Fil 1 | Komunikasyon sa Akademikong Filipino | 3 |  | 3 | None |  |
|  | Hist 1 | Philippine History | 3 |  | 3 | None |  |
|  | Math 1A | College Algebra | 3 |  | 3 | None |  |
|  | Math 2A | Plane and Spherical Trigonometry | 3 |  | 3 | None |  |
|  | ICS 111 | Introduction to Computer Science I (Lec) | 2 |  | 2 | None |  |
|  | ICS 111L | Introduction to Computer Science I (Lab) |  | 1 | 1 | None |  |
|  | ICS 112 | Computer Programming I | 2 |  | 2 | None |  |
|  | ICS 112L | Computer Programming I (Lab) |  | 1 | 1 | None |  |
|  | PE 1 | Physical Fitness | 2 |  | 2 | None |  |
| **Total** | | | 24 | 2 | 26 |  |  |

First Year - Second Semester

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Course No. | | Descriptive Title | Lec | Lab | Units | Pre-  requisite | Co requisites |
|  | Theo 2 | Believing into Discipleship | 3 |  | 3 | Theo 1 |  |
|  | Engl 2 | Communication Arts II | 3 |  | 3 | Engl 1 |  |
|  | Fil 2 | Pagbasa at Pagsulat Tungo sa Pananaliksik | 3 |  | 3 | Fil 1 |  |
|  | Psycho 1 | General Psychology with Drug Prevention | 3 |  | 3 | None |  |
|  | Math 3B | Analytic Geometry | 4 |  | 4 | Math 1A, Math 2A |  |
|  | Chem 1A | General and Inorganic Chemistry I (Lec) | 3 |  | 3 | None |  |
|  | Chem 1AL | General and Inorganic Chemistry I (Lab) |  | 1 | 1 | None |  |
|  | ICS 121 | Introduction to Computer Sciences II (Lec) | 2 |  | 2 | ICS 111 |  |
|  | ICS 121L | Introduction to Computer Sciences II (Lab) |  | 1 | 1 | ICS 111L | ICS 121 |
|  | ICS 222 | Computer Programming II (Lec) | 2 |  | 2 | ICS 121 |  |
|  | ICS 222L | Computer Programming II (Lab) |  | 1 | 1 | ICS 112L | ICS 122 |
|  | PE 2 | Rhythmic Activities | 2 |  | 2 | PE1 |  |
| **Total** | | | 25 | 2 | 28 |  |  |

First Year - Summer

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Course No. | | Descriptive Title | Lec | Lab | Units | Pre-  requisite | Co requisites |
|  | NSTP-WTS 1 | National Service Training Program I | 3 |  | 3 | None |  |
|  | Hist 2 | Life and Works of Rizal | 3 |  | 3 | Hist 1 |  |
|  | Polit Sc 1 | Politics and Governance w/ Phil. Const. | 3 |  | 3 |  |  |
| **Total** | | | 9 |  | 9 |  |  |

Second Year - First Semester

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Course No. | | Descriptive Title | Lec | Lab | Units | Pre-  requisite | Co requisites |
|  | Theo 3 | Discipleship in Community | 3 |  | 3 | Theo 2 |  |
|  | Engl 4 | Public Speaking and Argumentation | 3 |  | 3 | Engl 2 |  |
|  | Philos 2 | Logic | 3 |  | 3 |  |  |
|  | Econ 1 | Basic Economics with TAR | 3 |  | 3 |  |  |
|  | Math 4A | Differential Calculus | 3 |  | 3 | Math 3B |  |
|  | ICS 211 | Data Structures with Algorithm Development (Lec) | 2 |  | 2 | ICS 122 |  |
|  | ICS 211L | Data Structures with Algorithm Development (Lab) |  | 1 | 1 | ICS 122, ICS 122L | ICS 211 |
|  | PE 3 | Individual / Dual Sports and Games | 2 |  | 2 | PE 1 |  |
| **Total** | | | 23 | 1 | 24 |  |  |

Second Year – Second Semester

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Course No. | | Descriptive Title | Lec | Lab | Units | Pre-  requisite | Co requisites |
|  | Theo 4 | Living Like Jesus | 3 |  | 3 | Theo 3 |  |
|  | Philos 2 | Ethics | 3 |  | 3 | Philos 1 |  |
|  | Phys 1A | College Physics I (Lec) | 3 |  | 3 | Math 1A, Math 2A |  |
|  | Phys 1AL | College Physics I (Lab) |  | 1 | 1 | Math 1A, Math 2A |  |
|  | Math 5A | Integral Calculus | 4 |  | 4 | Math 3B |  |
|  | ICS 222 | Computer Architecture (Lec) | 2 |  | 2 | ICS 212 |  |
|  | ICS 222L | Computer Architecture (Lab) |  | 1 | 1 | ICS 212 | ICS 222 |
|  | ICS 221 | File Organization | 3 |  | 3 | ICS 211 |  |
|  | PE 4 | Team Sports and Games | 2 |  | 2 | PE 1 |  |
| **Total** | | | 25 | 2 | 23 |  |  |

Second Year - Summer

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Course No. | | Descriptive Title | Lec | Lab | Units | Pre-  requisite | Co requisites |
|  | NSTP – CWTS 2 | National Service Training Program II | 3 |  | 3 | NSTP – CWTS 1 |  |
|  | ICS 313 | Discrete Mathematics | 3 |  | 3 | ICS 211, Philos 1 |  |
|  | Phys 2B | Electromagnetism and Electricity | 3 |  | 3 | Phys 1A, Phys 1AL |  |
| **Total** | | | 9 |  | 9 |  |  |

Third Year - First Semester

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Course No. | | Descriptive Title | Lec | Lab | Units | Pre-  requisite | Co requisites |
|  | Engl 7 | Technical Writing | 3 |  | 3 | Engl 2 |  |
|  | ICS 311 | Operating Systems (Lec) | 2 |  | 2 | ICS 211, ICS 222, ICS 222L |  |
|  | ICS 311L | Operating Systems (Lab) |  | 1 | 1 | ICS 222L | ICS 311 |
|  | ICS 312 | Programming Applications (Lec) | 2 |  | 2 | ICS 211, ICS 211L |  |
|  | ICS 312L | Programming Applications (Lab) |  | 1 | 1 | ICS 211L | UCS 312 |
|  | CS 311A | Object Oriented Programming | 3 |  | 3 | ICS 221 |  |
|  | IT 311 | Systems Analysis and Design | 3 |  | 3 | ICS 221 |  |
|  | ICS 321 | Database Management Systems (Lec) | 2 |  | 2 | ICS 313, IT 311 | IT 311, ICS 312 |
|  | ICS 321L | Database Management Systems (Lab) |  | 1 | 1 |  | ICS 321 |
| **Total** | | | 15 | 3 | 18 |  |  |

Third Year - Second Semester

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Course No. | | Descriptive Title | Lec | Lab | Units | Pre-  requisite | Co requisites |
|  | ICS 322 | Data Communications and Computer Networks (Lec) | 2 |  | 2 | ICS 311 |  |
|  | ICS 322L | Data Communications and Computer networks (Lab) |  | 1 | 1 | ICS 311L | ICS 322 |
|  | CS 321a | Introduction to Automata and Formal Languages | 3 |  | 3 | ICS 313 |  |
|  | CS 321d | Structure of Programming Languages | 3 |  | 3 | ICS 313 |  |
|  | CS 322 | Methods of Research in Computer Sciece | 3 |  | 3 |  |  |
|  | IT 324 | Web Systems and Technologies (Lec) | 2 |  | 2 | 3rd year standing |  |
|  | IT 324L | Web Systems and Technologies (Lab) |  | 1 | 1 |  | ICS 324 |
|  | Math 8A | Abstract Algebra | 3 |  | 3 | ICS 313 |  |
| **Total** | | | 18 | 2 | 16 |  |  |

Third Year - Summer

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Course No. | | Descriptive Title | Lec | Lab | Units | Pre-  requisite | Co requisites |
|  | CS 412 | Practicum |  |  | 3 | 4th year standing |  |
| **Total** | | |  |  | 4 |  |  |

Fourth Year - First Semester

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Course No. | | Descriptive Title | Lec | Lab | Units | Pre-  requisite | Co requisites |
|  | ICS 411 | Quality Consciousness, Habit and Processes | 3 |  | 3 | 4th year standing |  |
|  | Research 1 | CS Thesis I | 3 |  | 3 | 4th year standing |  |
|  | IT 413 | Software Engineering | 3 |  | 3 | 4th year standing |  |
|  | CS 321B | Artificial Intelligence | 3 |  | 3 | 4th year standing |  |
|  | CS 311B | Compiler Design | 3 |  | 3 | 4th year standing |  |
|  | Elective | Elective | 3 |  | 3 | 4th year standing |  |
| **Total** | | | 18 |  | 18 |  |  |

Fourth Year - Second Semester

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Course No. | | Descriptive Title | Lec | Lab | Units | Pre-  requisite | Co requisites |
|  | Research 2 | CS Thesis II | 3 |  | 3 | Research 1 |  |
|  | IT 422 | System Resource Management | 3 |  | 3 | 4th year standing |  |
|  | CS 422A | Modeling and Simulation | 3 |  | 3 | 4th year standing |  |
|  | Math 7A | Fundamentals of Probability and Statistics | 3 |  | 3 | Math 5A |  |
|  | Elective | Elective | 3 |  | 3 | 4th year standing |  |
| **Total** | | | 15 |  | 15` |  |  |

ITE Electives: REQUIRED

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Course No. | | Descriptive Title | Lec | Lab | Units | Pre-  requisite | Co requisites |
|  | IT 311 | Systems Analysis and Design | 3 |  | 3 | ICS 221 |  |
|  | IT 412 | Practicum | 3 |  | 3 | 3rd year standing |  |
|  | IT 413 | Software Engineering | 3 |  | 3 | 4Th year standing |  |
|  | CS321B | Artificial Intelligence | 3 |  | 3 | 4th year standing |  |
|  | IT 324 | Web Systems and Technologies (Lec) | 2 |  | 2 | 3rd year standing |  |
|  | IT 324L | Web Systems and Technologies (Lab) |  | 1 | 1 | 3rd year standing | IT 324 |

Six (6) units FREE Electives are chosen from the following list.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Course No. | | Descriptive Title | Lec | Lab | Units | Pre-  requisite |
|  | ICS311A | Numerical Methods | 3 |  | 3 | 3rd year standing |
|  | IT 311A | E-Commerce | 2 | 1 | 3 | 3rd year standing |
|  | IT 311B | Human Computer Interaction | 3 |  | 3 | 3rd year standing |
|  | CS 321C | Intro to Parallel Computing | 3 |  | 3 | 3rd year standing |
|  | IT 321B | Data Warehousing | 3 |  | 3 | 3rd year standing |
|  | ICS 411B | Intro to Operations Research | 3 |  | 3 | 4th year standing |
|  | ICS 411A | Advanced Operating Systems | 3 |  | 3 | 4th year standing |
|  | CS 411A | Advanced Computer Architecture | 3 |  | 3 | 4th year standing |
|  | CS 411B | Distributed Systems | 3 |  | 3 | 4th year standing |
|  | CS 411C | Special Topics in Computer Science | 3 |  | 3 | 4th year standing |
|  | IT 411A | Introduction to Neural Networks | 3 |  | 3 | 4th year standing |
|  | IT 411B | Advances Database Management Systems | 3 |  | 3 | 4th year standing |
|  | ICS 421A | Advanced Networking Topics | 2 | 1 | 3 | 4th year standing |
|  | ICS 421B | Knowledge and Complex Adaptive Systems | 3 |  | 3 | 4th year standing |
|  | CS 421A | Interacting and Communicating | 3 |  | 3 | 4th year standing |
|  | CS 421B | Computer Graphics | 2 | 1 | 3 | 4th year standing |
|  | CS 421C | Computer Performance Modeling | 3 |  | 3 | 4th year standing |
|  | IT 412A | Advance Software Engineering | 3 |  | 3 | 4th year standing |
|  | IT 412B | IT Organization Management | 3 |  | 3 | 4th year standing |
|  | CS 422B | Intro to Robotics | 3 |  | 3 | 4th year standing |
|  | IT 013 | Mobile Technology | 2 | 1 | 3 | 4th year standing |