Republic of the Philippines

Sorsogon State College

Sorsogon City Campus

Engineering-Architecture Department

**NEW ENHANCED CURRICULUM**

**BACHELOR OF SCIENCE IN CIVIL ENGINEERING**

**(CMO no. 29, s. 2008)**

**FIRST YEAR - 1ST SEMESTER**

|  |  |  |  |
| --- | --- | --- | --- |
| CODE  | SUBJECTS | NO OF HOURS | PRE-REQUISITE |
| LEC | LAB | UNITS |
|  | \*English Plus |  |  |  |  |
| Math 1 | College Algebra | 3 |  0 | 3 | NONE |
| Math 2 | Plane &Spherical trigonometry | 3 | 0 | 3 | NONE |
| Chem 1 | General Chemistry | 3 | 3 | 4 | NONE |
| Drawing 1 | Engineering Drawing | 1 | 3 | 2 | NONE |
| Eng 1 | Communication Skills | 3 | 0 | 3 | NONE |
| Fil 1 | Sining ng Pakikipagtalastasan | 3 | 0 | 3 | NONE |
| Soc Scie 1 | Taxation and Agrarian Reform | 3 | 0 | 3 | NONE |
| Comp 1 | Computer Fundamentals& Prog’g | 1 | 3 | 2 | NONE |
| P.E 1 | Health and Physical Fitness | 2 | 0 | 2 | NONE |
| NSTP 1 | CWTS 1/ROTC 1 |  |  | (3) | NONE |
|  | TOTAL | 21 | 12 | 25 |  |
|  | \*To be taken by students who failed in the English Proficiency test |

**FIRST YEAR - 2ND SEMESTER**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CODE | SUBJECTS | NO OF HOURS | UNITS | PRE-REQUISITE |
| LEC | LAB |
| Math 3 | Advance algebra | 2 | 0 | 2 | Math 1 |
| Math 4 | Solid Mensuration | 2 | 0 | 2 | Math 1, Math 2 |
| Math 5 | Analytic Geometry | 2 | 0 | 2 | Math 1, Math 2 |
| Eng 2 | Tech., Writing, Reporting & Corr. | 3 | 0 | 3 | Eng 1 |
| Fil 2 | Pagbasa at Pagsulat sa Iba’t ibang Diskurso | 3 | 0 | 3 | Fil 1 |
| Hum 1 | Lit. Drama & Visual Art, Music & Dance | 3 | 0 | 3 | NONE |
| Soc Sci 2 | General Psychology | 3 | 0 | 3 |  |
| Draw 2 | Engineering Drawing 2(CAD 1) | 1 | 3 | 2 | Draw 1 |
| P.E 2 | Individual Sports | 2 | 0 | 2 | P.E 1 |
| NSTP | CWTS 2/ROTC2 |  |  | (3) | NSTP 1 |
|  | TOTAL | 21 | 3 | 22 |  |

**SECOND YEAR - 1ST SEMESTER**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CODE | SUBJECTS | NO OF HOURS | UNITS | PRE-REQUISITE |
| LEC | LAB |
| Math 6 | Differential Calculus | 4 | 0 | 4 | Phys 1 |
| PHS 1 | Physics 1 | 3 | 3 | 4 | Math 2 |
| Eng 3 | Speech Communication | 3 | 0 | 3 | Eng 1 & 2 |
| Hum 2 | Humanities 2 | 3 | 0 | 3 |  |
| Soc Sci 3 | Social Science 3 | 3 | 0 | 3 |  |
| MS 1 | Life & Works of Rizal | 3 | 0 | 3 |  |
| P.E 3 | Team Sports | 2 | 0 | 2 | P.E 1&2 |
|  | TOTAL | 21 | 3 | 22 |  |

**SECOND YEAR - 2ND SEMESTER**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | NO OF HOURS |  |  |
| CODE | SUBJECTS | LEC | LAB | UNITS | PRE-REQUISITE |
| PHS 2 | Physics 2 | 3 | 3 | 4 | Phys 1 |
| Math 7 | Integral Calculus | 4 | 0 | 4 | Math 5 |
| Math 8 | Probability & Statistic | 3 | 0 | 3 | Math 1 |
| Hum 3 | Humanities 3 | 3 | 0 | 3 |  |
| Soc Sci 4 | Social Science 4 | 3 | 0 | 3 |  |
| Philo | Logic & Philo Analysis | 3 | 0 | 3 |  |
| BES 1 | Environmental Engineering | 3 | 0 | 3 |  |
| P.E. 4 | Recreational Activities | 2 | 0 | 2 | P.E 1,2,3 |
|  | TOTAL | 24 | 3 | 25 |  |

**THIRD YEAR - 1ST SEMESTER**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CODE | SUBJECTS | NO OF HOURS |  | PRE-REQUISITE |
| LEC | LAB | UNITS |
| Math 9 | Differential Equations | 3 | 0 | 3 | Math 6 |
| Mech 1 | Statistic of Rigid Bodies | 3 | 0 | 3 | Phys 1, Math 6 |
| ME 310 | Basic Mechanical Engineering | 3 | 0 | 3 | Math 1,Math 2 & Phys 2 |
| CE 311 | Surveying 1 | 3 | 3 | 4 | Math 3, Math 2, Draw 1 |
| EE 310 | Basic Electrical Engineering | 3 | 0 | 3 | Phys 2 |
| BES 2 | Engineering Economy | 3 | 0 | 3 | Third Year Standing |
| Comp 2 | CADD Basic | 1 | 3 | 2 | Comp 1 |
|  | TOTAL | 19 | 6 | 21 |  |

**THIRD YEAR - 2ND SEMESTER**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CODE | SUBJECTS | NO OF HOURS | UNITS | PRE-REQUISITE |
| LEC | LAB |
| Math 10 | Advance Engineering Mathematics for CE | 3 | 0 | 3 | Math 9 |
| Mech 2 | Dynamics of Rigid Bodies | 3 | 0 | 3 | Mech 1 |
| Mech 3 | Mechanics of Deformable Bodies | 2 | 3 | 3 | Mech 1 |
| CE 322 | Surveying 2 | 3 | 3 | 4 | CE 311 |
| BES 3 | Safety Management | 1 | 0 | 1 | Third year Standing |
| BES 4 | Engineering Management | 3 | 0 | 3 | Third year Standing |
| Comp 3 | CADD 2 | 1 | 3 | 2 | Comp 1 &2 |
|  | TOTAL | 16 | 9 | 19 |  |

**FOURTH YEAR - 1ST SEMESTER**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | NO OF HOURS |  |  |
| CODE | SUBJECTS | LEC | LAB | UNITS | PRE-REQUISITE |
| Math 11 | Numerical Methods | 2 | 3 | 3 |  |
| CE 411 | Structural Theory 1 | 3 | 3  | 4 | Mech 3 |
| CE 412 | Geotechnical Engineering 1 soil Mechanics | 3 | 3 | 4 | Mech 3 |
| CE 413 | Mechanics of Fluids | 2 | 3 | 3 | Mech 2,Math 9 |
|  CE 414 | Highway Engineering | 3 | 0 | 3 | CE 322 |
| CE 415 | Constructions Mat’ls & Testing | 2 | 3 | 3 | Mech 3 |
| CE 416 | Building Design 1 | 1 | 3 | 2 | Engineering Drawing |
|  | TOTAL | 16 | 18 | 22 |  |

Note: Summer (On-the-Job Training) - 6 Weeks (270hrs)

**FOURTH YEAR 2ND SEMESTER**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CODE | SUBJECTS | NO OF HOURS | UNITS | PRE-REQUISITE |
| LEC | LAB |
| CE 421 | Structural Theory 2 | 3 | 3 | 4 | CE 411 |
| CE 422 | Structural Design (Reinforced Concrete) | 3 | 3 | 4 | CE 411,CE 421 |
| CE 423 | Hydraulics | 2 | 3 | 3 | CE 413 |
| CE 424 | Hydrology | 3 | 0 | 3 | CE 413 |
| CE 426 | Building Design 2 | 1 | 3 | 2 | CE 416 |
| CE 425 | Construction Methods & Project Management | 4 | 0 | 4 | 4th yr Standing |
|  | TOTAL | 16 | 12 | 20 |  |

**FIFTH YEAR - 1ST SEMESTER**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CODE | SUBJECTS | NO OF HOURS | UNITS | PRE-REQUISITE |
| LEC | LAB |
| CE 511 | Geotechnical Engineering 2(foundation Engineering) | 3 | 3 | 4 | CE 412 |
| CE 512 | Transportation Engineering | 3 | 0 | 3 | CE 414 |
| CE 513 | Structural Design 2 Steel & Timber) | 3 | 3 | 4 | CE 421 |
| CE 514 | Civil Engineering Project | 1 | 6 | 3 | 5th yr standing |
| CE 515 | Entrepreneurship for Engineers | 3 | 3 | 4 | 5th yr standing |
| CE 516 | Earthquake Engineering | 3 | 0 | 3 | 5th yr standing |
|  | TOTAL | 16 | 12 | 20 |  |

**FIFTH YEAR - 2ND SEMESTER**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CODE | SUBJECTS | NO OF HOURS | UNITS | PRE-REQUISITE |
| LEC | LAB |
| CE 521 | Water Resources Engineering 2 | 3 | 0 | 3 | CE 423 |
| CE 522 | CE Laws, Contents, Specification | 3 | 0 | 3 | CE 414 |
| CE 523 | Seminar & Field trip | 0 | 3 | 1 |  |
| ELECT 1 | Technical Elective 1 | 3 | 0 | 3 | 5th yr standing |
| ELECT 2 | Technical Elective 2 | 3 | 0 | 3 | 5th yr standing |
| ELECT 3 | Technical Elective 3 | 3 | 0 | 3 | 5th yr standing |
| ELECT 4 | Technical Elective 4 | 3 | 0 | 3 |  |
|  | TOTAL | 18 | 3 | 19 |  |

 TOTAL = 221 UNITS