

**BACHELOR OF SCIENCE IN CIVIL ENGINEERING
AMALGAMATED CURRICULUM (PG No. 24-2013)**

EFFECTIVE FIRST SEMESTER SCHOOL YEAR 2013-2014

FIRST YEAR - FIRST SEMESTER

| Course No. | GRADE | Descriptive Title | Lec | Lab | Units | Pre Requisite |
|------------|-------|--|-----|-----|-----------|---------------|
| Engl 11 | | Study & Thinking Skills | 3 | | 3 | |
| Fil 11 | | Komunikasyon sa Akademikong Filipino | 3 | | 3 | |
| Math 11 | | College Algebra | 3 | | 3 | |
| Math 12 | | Plane & Spherical Trigonometry | 3 | 1 | 4 | |
| Chem 11 | | General Chemistry | 3 | 1 | 4 | |
| Draw 11 | | Engineering Drawing 1 | 1 | | 1 | |
| CE Tech 11 | | Rough Carpentry | | 3 | 3 | |
| PE 11 | | Physical Fitness and Self Testing Activities | 2 | | 2 | |
| NSTP 11 | | National Service and Training Program 1 | 3 | | 3 | |
| Total | | | | | <u>26</u> | |

FIRST YEAR - SECOND SEMESTER

| Course No. | GRADE | Descriptive Title | Lec | Lab | Units | Pre Requisite |
|-------------|-------|---|-----|-----|-----------|---------------|
| Engl 12 | | Writing in the Discipline | 3 | | 3 | Engl 11 |
| Fil 12 | | Pagbasa at Pagsulat Tungo sa Pananaliksik | 3 | | 3 | Fil 11 |
| Math 211 | | Advanced Algebra | 3 | | 3 | Math 11 |
| Math 212 | | Analytic Geometry | 3 | | 3 | Math 11/12 |
| Math 213 | | Solid Mensuration | 3 | | 3 | Math 11/12 |
| Hum 11 | | Introduction to Humanities | 3 | | 3 | |
| Physics 211 | | Physics 1 | 3 | 1 | 4 | Math 11/12 |
| CE Tech 12 | | Planning Masonry & Steel Works | | 2 | 2 | CE Tech 11 |
| PE 12 | | Individual and Dual Sports | 2 | | 2 | PE 11 |
| NSTP 12 | | National Service and Training Program 2 | 3 | | 3 | NSTP 11 |
| Total | | | | | <u>29</u> | |

SECOND YEAR - FIRST SEMESTER

| Course No. | GRADE | Descriptive Title | Lec | Lab | Units | Pre Requisite |
|-------------|-------|---|-----|-----|-----------|--------------------|
| Engl 13 | | Speech and Oral Communication | 3 | | 3 | Engl 12 |
| Fil 13 | | Masing na Pagpapahayag | 3 | | 3 | Fil 12 |
| Math 221 | | Differential Calculus | 4 | | 4 | Math 211, 212, 213 |
| Physics 221 | | Physics 2 ((Electricity & Magnetism) | 3 | 1 | 4 | Physics 211 |
| Soc Sc 11 | | General Psychology w/ Drug Abuse Prevention | 3 | | 3 | |
| Hum 12 | | Arts Appreciation | 3 | | 3 | |
| Comp 11 | | Computer Fundamentals & Programming | | 2 | 2 | 2nd yr standing |
| CE Tech 13 | | Structural Welding | | 2 | 2 | CE Tech 12 |
| PE 13 | | Rhythmic Activities | 2 | | 2 | PE 11 |
| Total | | | | | <u>26</u> | |

SECOND YEAR - SECOND SEMESTER

| Course No. | GRADE | Descriptive Title | Lec | Lab | Units | Pre Requisite |
|------------|-------|--|-----|-----|-----------|---------------------------|
| Math 222 | | Integral Calculus | 4 | | 4 | Math 221 |
| Stat 11 | | Probability & Statistics | 3 | | 3 | Math 11 |
| Philo 11 | | Philosophy of Man with Logic | 3 | | 3 | |
| Soc Sc 12 | | Society, Culture and Family Planning | 3 | | 3 | |
| PI 11 | | Life, Works and Writings of Rizal | 3 | | 3 | |
| Soc Sc 14 | | Politics, Government with the New Constitution | 3 | | 3 | |
| EE 111 | | Basic Electrical Engineering | 3 | | 3 | Math 11 / 12, Physics 221 |
| CE Tech 14 | | Building, Wiring Installation | 3 | | 3 | CE Tech 13 |
| PE 14 | | Team Sports | 2 | | 2 | PE 11 |
| Total | | | | | <u>27</u> | |

THIRD YEAR - FIRST SEMESTER

| Course No. | GRADE | Descriptive Title | Lec | Lab | Units | Pre Requisite |
|------------|-------|------------------------------|-----|-----|-------|----------------------------|
| Math 311 | | Differential Equation | 3 | | 3 | Math 222 |
| Mech 11 | | Statics of Rigid Bodies | 3 | | 3 | Math 222, Physics 211 |
| ME 111 | | Basic Mechanical Engineering | 3 | | 3 | Math 11 / 12, Physics 221 |
| CE 311 | | Surveying 1 | 3 | 1 | 4 | Math 211 / 12, Physics 221 |

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|-------------|-------|---|-------|--|-----------|-----------------|
| Soc Sc 13 | _____ | Basic Economics with Taxation and Agrarian Reform | 3 | | 3 | |
| Eng'g Ec 31 | _____ | Engineering Economy | 3 | | 3 | 3rd yr standing |
| FL 11 | _____ | Foreign Language 1 | 3 | | 3 | Engl 13, Fil 13 |
| | | | Total | | <u>22</u> | |

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THIRD YEAR - SECOND SEMESTER

| Course No. | GRADE | Descriptive Title | Lec | Lab | Units | Pre Requisite |
|-------------|-------|---|-------|-----|-----------|-----------------|
| Math 312 | _____ | Advanced Engineering Mathematics for CE | 3 | | 3 | Math 311 |
| Mech 12 | _____ | Dynamics of Rigid Bodies | 2 | | 2 | Mech 11 |
| Mech 13 | _____ | Mechanics of Deformable Bodies | 3 | | 3 | Mech 11 |
| CE 312 | _____ | Surveying 2 | 3 | 1 | 4 | CE 311 |
| En Eng'g 32 | _____ | Environmental Engineering | 2 | | 2 | Chem 11 |
| Safe Mgt 32 | _____ | Safety Management | 1 | | 1 | 3rd yr standing |
| En Mgt 32 | _____ | Engineering Management | 3 | | 3 | 3rd yr standing |
| Fl 12 | _____ | Foreign Language 2 | 3 | | 3 | Engl 13, Fil 13 |
| | | | Total | | <u>21</u> | |

FOURTH YEAR - FIRST SEMESTER

| Course No. | GRADE | Descriptive Title | Lec | Lab | Units | Pre Requisite |
|------------|-------|---|-------|-----|-----------|-----------------|
| CE 411 | _____ | Structural Theory 1 | 3 | 1 | 4 | Mech 13 |
| CE 412 | _____ | Geotechnical Engineering 1 (Soil Mechanics) | 3 | 1 | 4 | Mech 13 |
| CE 413 | _____ | CE Laws, Contracts, Specification & Ethics | 3 | | 3 | 4th yr standing |
| CE 415 | _____ | Field Trip/Educational Tour | 1 | | 1 | 4th yr standing |
| CE416 | _____ | Mechanics of Fluids | 2 | 1 | 3 | Mech 12 |
| CE 417 | _____ | Building Design 1 | 1 | 1 | 2 | Draw 11 |
| CE 418 | _____ | Construction Materials & Testing | 2 | 1 | 3 | Mech 13 |
| CE 419 | _____ | Highway Engineering | 3 | | 3 | CE 312 |
| | | | Total | | <u>23</u> | |

FOURTH YEAR - SECOND SEMESTER

| Course No. | GRADE | Descriptive Title | Lec | Lab | Units | Pre Requisite |
|------------|-------|---|-------|-----|-----------|-----------------|
| CE 421 | _____ | Structural Theory 2 | 3 | 1 | 4 | CE 411 |
| CE 422 | _____ | Structural Design 1 (Reinforced Concrete) | 3 | 1 | 4 | CE 411 |
| CE 423 | _____ | Hydraulics | 2 | 1 | 3 | CE 416 |
| CE 424 | _____ | Hydrology | 3 | | 3 | CE 416 |
| CE 425 | _____ | Building Design 2 | 1 | 1 | 2 | CE 417 |
| Draw 122 | _____ | Computer Aided Drafting | | 2 | 2 | 4th yr standing |
| CE 426 | _____ | Geotechnical Engineering 2 (Foundation Eng'g) | 3 | 1 | 4 | CE 412 |
| | | | Total | | <u>22</u> | |

FIFTH YEAR - FIRST SEMESTER

| Course No. | GRADE | Descriptive Title | Lec | Lab | Units | Pre Requisite |
|------------|-------|--|-------|-----|-----------|-----------------|
| CE 511 | _____ | Water Resources Engineering | 3 | | 3 | CE 423 |
| CE 512 | _____ | Construction Method & Project Management | 3 | 1 | 4 | 5th yr standing |
| CE 513 | _____ | Transportation Engineering | 3 | | 3 | CE 419 |
| CE 514 | _____ | Structural Design 2 (Steel and Timber) | 3 | 1 | 4 | CE 421 |
| CE 515 | _____ | Civil Engineering Project 1 | 1 | 2 | 3 | 5th yr standing |
| CE 516 | _____ | Globalization | 3 | | 3 | 4th yr standing |
| | | | Total | | <u>20</u> | |

FIFTH YEAR - SECOND SEMESTER

| Course No. | GRADE | Descriptive Title | Lec | Lab | Units | Pre Requisite |
|-------------|-------|---|-----|-----|-----------|-----------------|
| CE 211 | _____ | Civil Engineering Project 2 | 1 | 2 | 3 | CE 515 |
| Elective 11 | _____ | Technical Elective 1 (Earthquake Engineering) | 3 | | 3 | 5th yr standing |
| Elective 12 | _____ | Technical Elective 2 (Prestressed Concrete Design) | 3 | | 3 | 5th yr standing |
| Elective 13 | _____ | Technical Elective 3 (Irrigation, Flood Control & Drainage) | 3 | | 3 | 5th yr standing |
| Elective 14 | _____ | Tech'l Elect 4 (Water & Waste Water Engineering) | 3 | | 3 | 5th yr standing |
| | | | | | <u>15</u> | |

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