

SEA

School of Engineering and Architecture

AY 2021 - 2022



BACHELOR OF SCIENCE IN ARCHITECTURE (BS ARCH)

BACHELOR OF SCIENCE IN ARCHITECTURE (BS ARCH)

- ► Academic Track Required: GAS, HUMMS, STEM, ABM
- ► 5 Years Board Course (with strict adherence to curriculum)
- ► Course Description: Architecture is the art, science or profession of planning, designing and constructing buildings in their totality taking into account their environment, in accordance with the principles of utility, strength and beauty.

| | First Semester | Second Semester | Short Term |
|-------------|----------------|-----------------|------------|
| First Year | 25 Units | 24 Units | - |
| Second Year | 29 Units | 30 Units | 6 Units |
| Third Year | 24.5 Units | 25.5 Units | - |
| Fourth Year | 20.5 Units | 20.5 Units | - |
| Fifth Year | 19 Units | 14 Units | |

- ► Competencies: Numerical/ Analytical; Aesthetic (Artistic); Technical/ Mechanical (Spatial)
- ► Career Path: Academe, Architect, College Instructor, Physical Planner, Draftsman
- ► Estimated Tuition Fee for First Semester AY 2021-2022- Php 29,423.00



BACHELOR OF SCIENCE IN CIVIL ENGINEERING (BS CE)

BACHELOR OF SCIENCE IN CIVIL ENGINEERING (BS CE)

- ► Academic Track Required: GAS, HUMMS, STEM, ABM
- ▶ 4 Years Board Course (with strict adherence to curriculum)
- ► Course Description: A field of engineering concerned with the planning, design and construction for environmental control, natural resource development, transportation facilities, tunnels, buildings, bridges, and other facilities for the need of people.

| | First Semester | Second Semester | Short Term |
|-------------|----------------|-----------------|------------|
| First Year | 24 Units | 26 Units | 8 Units |
| Second Year | 29 Units | 30 Units | 9 Units |
| Third Year | 25.5 Units | 22.5 Units | 3 Units |
| Fourth Year | 20.5 Units | 20.5 Units | - |

- ► Competencies: Numerical/ Analytical; Technical/ Mechanical (Spatial)
- ► Career Path: Academe, College Instructor, Engineer
- ► Estimated Tuition Fee for First Semester AY 2021-2022- Php 32,186.00



BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING (BS CHE)

BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING (BS CHE)

- ► Academic Track Required: GAS, HUMMS, STEM, ABM
- ▶ 4 Years Board Course (with strict adherence to curriculum)
- ► Course Description: A five-year engineering course that is ideally suited to students with proficiency in mathematics and chemistry. It is designed to give prospective students a firm foundation and education in general and chemical engineering, to instill in them a thought process unique to the engineering discipline.

| | First Semester | Second Semester | Short Term |
|-------------|----------------|-----------------|------------|
| First Year | 22 Units | 29 Units | 8 Units |
| Second Year | 30 Units | 26 Units | 7 Units |
| Third Year | 27.5 Units | 25.5 Units | 3 Units |
| Fourth Year | 25.5 Units | 22.5 Units | - |

- ► Competencies: Numerical/ Analytical; Technical/ Mechanical (Spatial); Science
- ► Career Path: Chemical Engineer, Chemist, College Instructor, Engineer
- ► Estimated Tuition Fee for First Semester AY 2021-2022- Php 24,683.00



BACHELOR OF SCIENCE IN ELECTRONICS ENGINEERING (BS ECE)

BACHELOR OF SCIENCE IN ELECTRONICS ENGINEERING (BS ECE)

- ► Academic Track Required: GAS, HUMMS, STEM, ABM
- ▶ 4 Years Board Course (with strict adherence to curriculum)
- ► Course Description: It studies the theory and applications of electronic and telecommunication system design. ECE covers electricity, electronics, electrical power, electrical machinery, digital systems, microprocessor-computer systems, instrumentation, automation systems, telecommunications, control systems, and information technology.

| | First Semester | Second Semester | Short Term |
|-------------|----------------|-----------------|------------|
| First Year | 24 Units | 25 Units | 12 Units |
| Second Year | 25 Units | 29 Units | 8 Units |
| Third Year | 26.5 Units | 26.5 Units | 3 Units |
| Fourth Year | 21.5 Units | 16.5 Units | - |

- ► Competencies: Numerical/ Analytical; Technical/ Mechanical (Spatial)
- ► Career Opportunities: Telecommunications, Control Systems and Automation, Robotics, Microelectronics, Biomedical Engineering, Manufacturing, Aviation and Aerospace, Information Technology, Scientific Research
- ► Estimated Tuition Fee for First Semester AY 2021-2022- Php 31,215.00



BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING (BS EE)

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING (BS EE)

- ► Academic Track Required: GAS, HUMMS, STEM, ABM
- ▶ 4 Years Board Course (with strict adherence to curriculum)
- ► Course Description: Students will study electricity: how it works, how it is generated, how it is transmitted, and how it is used to power everything from light bulbs and radios to cell phones and robots. Students will also learn how to design their own electric-powered projects.

| | First Semester | Second Semester | Short Term |
|-------------|----------------|-----------------|------------|
| First Year | 23 Units | 23 Units | 8 Units |
| Second Year | 27 Units | 28 Units | - |
| Third Year | 29.5 Units | 26.5 Units | 2 Units |
| Fourth Year | 28.5 Units | 23.5 Units | - |

- ► Competencies: Numerical/ Analytical; Technical/ Mechanical (Spatial)
- ► Career Path: Academe, College Instructor, Engineer, Electrician
- ► Estimated Tuition Fee for First Semester AY 2021-2022- Php 27,948.00



BACHELOR OF SCIENCE IN MINING ENGINEERING (BS EM)

BACHELOR OF SCIENCE IN MINING ENGINEERING (BS EM)

- ► Academic Track Required: GAS, HUMMS, STEM, ABM
- ▶ 4 Years Board Course (with strict adherence to curriculum)
- ► Course Description: A profession that deals with the application of mathematics, natural and applied sciences, humanities and social sciences in mineral deposit assessment; mine feasibility study; mine design, development and construction; management of mining operations and progressive rehabilitation and associated activities and processes; environmental management closure; mine decommissioning to harness mineral resources safely and economically for social benefits of the country.

| | First Semester | Second Semester | Short Term |
|-------------|----------------|-----------------|------------|
| First Year | 25 Units | 27 Units | - |
| Second Year | 26 Units | 26 Units | 7 Units |
| Third Year | 25.5 Units | 25.5 Units | - |
| Fourth Year | 22.5 Units | 17.5 Units | - |

- ► Competencies: Numerical/ Analytical; Science
- ► Career Opportunities: Mining Engineer, Process Refinery Plant Engineer, Mine Planning Engineer, Static Equipment Engineer, Instrumentation & Control Engineer, Mining Consultant
- ► Estimated Tuition Fee for First Semester AY 2021-2022- Php 27,032.00



BACHELOR OF SCIENCE IN GEODETIC ENGINEERING (BS GE)

BACHELOR OF SCIENCE IN GEODETIC ENGINEERING (BS GE)

- ► Academic Track Required: GAS, HUMMS, STEM, ABM
- ▶ 4 Years Board Course (with strict adherence to curriculum)
- ► Course Description: The Geodetic Engineering Department prepares the students to undertake land measures for legal documentation not only in the Philippines but also abroad. This involves measurements on land, sea and space with great precision utilizing state-of-the-art computerized survey instruments. Geodetic engineers remain to be in demand here and abroad.

| | First Semester | Second Semester | Short Term |
|-------------|----------------|-----------------|------------|
| First Year | 26 Units | 22 Units | 8 Units |
| Second Year | 27 Units | 23 Units | 4 Units |
| Third Year | 23.5 Units | 25.5 Units | 3 Units |
| Fourth Year | 21.5 Units | 17.5 Units | - |

- ► Competencies: Numerical/ Analytical; Technical/ Mechanical (Spatial)
- ► Career Path: Geodetic Engineer, GE Educator, Geodetic Consultant, Cartographer, Building Surveyor, Land Surveyor, GIS Specialist, Construction Surveyor, Hydrographer
- ► Estimated Tuition Fee for First Semester AY 2021-2022- Php 36,195.00



BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING (BS IE)

BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING (BS IE)

- ► Academic Track Required: GAS, HUMMS, STEM, ABM
- ▶ 4 Years Non-Board Course (with strict adherence to curriculum)
- ► Course Description: Studies the application of engineering methods and the principles of scientific management to industrial systems. It is concerned with the design, improvement and installation of integrated systems of men, materials, and equipment facilities, drawing upon specialized knowledge and skills in the mathematical, physical and social sciences together with principles, and methods of engineering analysis and design, to specify, predict, and evaluate the results to be obtained from such systems.

| | First Semester | Second Semester | Short Term |
|-------------|----------------|-----------------|------------|
| First Year | 22 Units | 20 Units | 8 Units |
| Second Year | 28 Units | 27 Units | 6 Units |
| Third Year | 26.5 Units | 28.5 Units | 3 Units |
| Fourth Year | 25.5 Units | 21.5 Units | - |

- ► Competencies: Numerical/ Analytical; Technical/ Mechanical (Spatial)
- ► Career Opportunities: Sales Engineer, Production Engineer, Operations Research Engineer, Project Engineer, Maintenance Engineer, Systems Design Engineer, Quality Control Supervisor
- ► Estimated Tuition Fee for First Semester AY 2021-2022- Php 24,683.00



BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING (BS ME)

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING (BS ME)

- ► Academic Track Required: GAS, HUMMS, STEM, ABM
- ► 4 Years Board Course (with strict adherence to curriculum)
- ► Course Description: It deals with the design, management, maintenance and installation of machinery, equipment of the following installation such as power plants, power transmission, machine prime movers, elevators, refrigeration and air conditioning, boilers and pressure vessels, pressurized piping, manufacturing processes, fuels and lubricants and materials.

| | First Semester | Second Semester | Short Term |
|-------------|----------------|-----------------|------------|
| First Year | 24 Units | 22 Units | 8 Units |
| Second Year | 26 Units | 28 Units | 6 Units |
| Third Year | 26.5 Units | 28.5 Units | 1 Unit |
| Fourth Year | 24.5 Units | 25.5 Units | - |

- ► Competencies: Numerical/ Analytical; Technical/ Mechanical (Spatial)
- ► Career Path: Academe, College Instructor, Engineer
- ► Estimated Tuition Fee for First Semester AY 2021-2022- Php 26,848.00



BACHELOR OF SCIENCE IN MECHATRONICS ENGINEERING (BS MECE)

BACHELOR OF SCIENCE IN MECHATRONICS ENGINEERING (BS MECE)

- ► Academic Track Required: GAS, HUMMS, STEM, ABM
- ▶ 4 Years Non-Board Course (with strict adherence to curriculum)
- ► Course Description: A five-year non-board exam course that integrates Mechanical, Computer, Electronics and Communications and Control Engineering theories and applications to produce enhanced products and services in the areas of electrical / electronics design, microprocessors/microcontrollers, embedded robotic system, automated system design, information technology and communications system. Mechatronics Engineering spans a wide array of choices and is found in every industry that requires electronics, information technology, telecommunications and automated production within its infrastructure.

| | First Semester | Second Semester | Short Term |
|-------------|----------------|-----------------|------------|
| First Year | 23 Units | 22 Units | 8 Units |
| Second Year | 26 Units | 28 Units | 9 Units |
| Third Year | 24.5 Units | 25.5 Units | 3 Units |
| Fourth Year | 23.5 Units | 21.5 Units | - |

- ► Competencies: Numerical/ Analytical; Technical/ Mechanical (Spatial)
- ▶ Career Path: Academe, College Instructor, Engineer, Research & Development Engineer
- ► Estimated Tuition Fee for First Semester AY 2021-2022- Php 26,066.00