

## UA&P SCHOOL OF SCIENCES AND ENGINEERING

The School of Sciences and Engineering (SSE) aims to form its students into Renaissance scientists and engineers with a unique portfolio of knowledge, abilities, skills and habits, ensured by the University's long-standing tradition in the liberal arts.

UA&P's pioneers saw the need to humanize the sciences and engineering, both of which experienced rapid technological growth at the turn of the century. The sense of the transcendent – of the 'beyond what is apparent' – was lost on the way and such loss led to greater materialism. Today's engineers and scientists may have effective models to earn points or invent things, but all at the cost of ethical conduct. The School of Sciences and Engineering aims to address that.

SSE confers the following degrees:

- Bachelor of Science in Data Science
- Bachelor of Science in Industrial Engineering
- Bachelor of Science in Information Technology
- Master in Information Technology

Departments under the School

- Department of Engineering
- Department of Information Science and Technology
- Department of Mathematics
- Department of Natural Sciences

## BACHELOR OF SCIENCE IN DATA SCIENCE

With the explosion of data which has changed almost all industries around us – marketing, health care, entertainment, environmental protection, transportation and other basic services, to name a few, there is a need for a new breed of scientists who can understand this vast amount of information in order to draw conclusions that will aid decision-making relevant to these industries. To address this need, UA&P offers the Bachelor of Science in Data Science (BS DS) Program.

Bachelor of Science in Data Science is a four-year program that aims to produce Data Scientists equipped with technical, leadership, business and human competencies necessary in the field; and able to solve real-world problems using perspectives from mathematics, statistics, information technology, and the humanities. The program includes study of machine learning algorithms, mathematical and statistical modeling and predictions, analytical and technological tools for making sense of data, the art of presenting the results of analysis to relevant stakeholders, and the use of data at the service of the human person.

Being a fast-developing field worldwide, data science opens to our BS DS graduates great career opportunities not only in the Philippines. For three years in a row, data scientist has been identified as the number one job in the US by Glassdoor and the US Bureau of Labor Statistics reports that the increase in the needs of data science will create 11.5 million job openings by 2026. Data science experts are necessary, not only in technology but in practically all job sectors.

In the Philippines, there is not only a huge demand but also a shortage of qualified data scientists. Some of the data science careers one can engage in are as follows: data scientist, data analyst, data architect, data engineer, data machine learning scientist, machine learning engineer, data and analytics manager, database administrator, business analyst, market research analyst, information systems analyst, financial analyst, operations analyst, operations research analyst, corporate planning analyst, and many more.

## BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING

*Become a Renaissance engineer.*

The BS Industrial Engineering Program is a 4-year program envisioned to produce engineering professionals who can plan, design and implement ethical, socially relevant and environmentally sound engineering and technology-based solutions to complex economic, management and industrial problems.

Using an in-depth education in the liberal arts as the student's intellectual foundation, the BSIE Program combines UA&P's current expertise in economics, management, and information technology with competent instruction in the theoretical and applied sciences and mathematics and the core engineering courses.

The BSIE Program hopes to produce true Renaissance engineers of the new millennium, who are educated in "multidisciplinary and integration...working between disciplines, and in new, innovative aspects of science, as well as engineering and technology, liberal arts, leadership, ethics, [and] entrepreneurship."

### CURRICULUM

All BSIE students are exposed to a wide range of engineering applications that prepare them for an area of concentration in any of the following:

- Production and operations management
- Operations research
- Organization, technology, and entrepreneurship
- Financial and decision engineering
- Technology policy

## BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

*Move at the speed of innovation.*

The Information Technology Program of the University of Asia and the Pacific (UA&P) goes beyond the traditional confines of computer science by exposing students to an environment oriented to both business and technology. Students develop not only the technical skills, but also the business management skills and soft skills as well as the moral and ethical grounding students need to become the complete IT professional for the Philippines, Asia, and the rest of the world.

### **CURRICULUM**

Our IT Program is built upon the liberal arts program of the University but has strengthened mathematics and science components in order to provide students with solid general education training. The IT specialization courses focus on business systems development and are meant to develop students in the following competencies: software, hardware and networking, and business.

## MASTER IN INFORMATION TECHNOLOGY

*The complete IT professional.*

The Master in Information Technology (MIT) program of UA&P aims to produce the complete IT professional – equally capable as a software engineer, systems administrator, business analyst, and researcher. The master’s degree gives the graduate an edge in the IT industry as it trains graduate students not just to be administrators, but to be managers, senior engineers, strategic planners, chief information officers, entrepreneurs, and educators. It does this by providing IT training that focuses on the development of intellectual activities and not just the acquisition of skills.

The program emphasizes the acquisition of concepts and technologies preparing and enabling the graduate student for the industrial practice of systems integration, systems administration, systems planning, systems implementation, and other activities that maintain the integrity and proper functionality of a system and its components. It also involves projects relevant to the industry including business, education, and government.

### Admission Qualifications

- Graduate of any degree with two years’ work experience.
- Satisfactory interview results
- Proficiency in oral and written communication skills

### Admission Requirements

(To be submitted in a short brown envelope)

- Completed MIT application form
- Transcript of Records (Original Copy)
- Curriculum Vitae (with 2x2 photo)
- Two 2x2 pictures
- Two letters of recommendation (from supervisor or former professors)

### Academic Calendar

- 1<sup>st</sup> Quarter – August to October
- 2<sup>nd</sup> Quarter – November to January
- 3<sup>rd</sup> Quarter – February to April
- 4<sup>th</sup> Quarter – May to July

## CONTACT INFORMATION

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