

Bachelor Degree in Information Systems and Network Engineering (Bilingual Program) 143 credits

Study Plan

The 1st year: First Semester				Credits
001101	ENGL	101	Fundamental English 1	3
206161	MATH	161	Calculus for Engineering 1	3
207105	PHYS	105	Physics for Engineering and Agro-Industry Students I	3
259104	ENGR	104	Engineering Drawing	3
259191	ENGR	191	Student Quality Development through Activities 1	1
261102	CPE	102	Programming Language	3
269101	ISNE	101	Introduction to Information Systems and Network Engineering	3
				(Total) 19
The 1st year: Second Semester				Credits
001102	ENGL	102	Reading and Writing in English	3
206162	MATH	162	Calculus for Engineering 2	3
261205	PHYS	205	Data Structures and Algorithms	3
269103	PHYS	103	Programming Languages for Information Systems and Network Engineering	3
269105	ISNE	105	Information Systems and Network Engineering Laboratory I	1
269130	ISNE	130	Fundamentals of Data and Computer Communications	3
-	-	-	GE Science & Mathematics	3
				(Total) 19
The 2nd year: First Semester				Credits
001201	ENGL	201	Critical Reading and Effective Writing	3
261200	CPE	200	Object-Oriented Programming Language	3
255201	IE	201	Quantitative Analysis in Industrial Engineering	3
261335	CPE	335	Computer Networks	3
261336	CPE	336	Computer Networks Laboratory	1
269200	ISNE	200	Web Programming Language	3
269201	ISNE	201	Information Systems and Network Engineering Laboratory II	1
269202	ISNE	202	Algorithms for Information Systems and Network Engineering	3
				(Total) 20
The 2nd year: Second Semester				Credits
001225	ENGL	225	English in Science and Technology Context	3
259103	ENGR	103	Engineering Materials	3
261342	CPE	342	Fundamentals of Database Systems	3
261343	CPE	343	Database System Laboratory	1
261433	CPE	433	Network Programming	3
269210	ISNE	210	Computer Architecture for Information Systems and Network Engineering	3
-	-	-	GE Humanities & Social Science	3
				(Total) 19
Normal Track				
The 3rd year: First Semester				Credits
261305	CPE	305	Operating Systems	3
261434	CPE	434	Computer Network Design and Management	3
261361	CPE	361	Software Engineering	3
269340	ISNE	340	Data Centric Application Development	3
-	-	-	GE Humanities & Social Science	6
				(Total) 18

The 3rd year: Second Semester				Credits
259194	ENGR	194	Student Quality Development through Activities 4	1
261446	CPE	446	Information Systems	3
261447	CPE	447	Network and Information Security	3
269341	ISNE	341	Data Warehousing and Business Intelligence for Information Systems and Network Engineering	3
269360	ISNE	360	Platform Programming	3
269370	ISNE	370	Project Management for Information Systems and Network Engineering	3
-	-	-	Major Elective	3
-	-	-	GE Science & Mathematics	3
				(Total) 22

The 4th year: First Semester				Credits
269430	ISNE	430	Wireless and Broadband Computer Networks	3
269470	ISNE	470	Information Technology Service Management	3
269491	ISNE	491	Project Survey	1
-	-	-	Major Electives	6
-	-	-	Free Electives	3
				(Total) 16

The 4th year: Second Semester				Credits
259192	ENGR	192	Student Quality Development through Activities 2	1
269492	ISNE	492	Project	3
-	-	-	Major Elective	3
-	-	-	Free Elective	3
				(Total) 10

Co-op Track

The 3rd year: First Semester				Credits
261305	CPE	305	Operating Systems	3
261434	CPE	434	Computer Network Design and Management	3
261361	CPE	361	Software Engineering	3
269340	ISNE	340	Data Centric Application Development	3
-	-	-	GE Humanities & Social Science	6
-	-	-	Free Elective	3
				(Total) 21

The 3rd year: Second Semester				Credits
259194	ENGR	194	Student Quality Development through Activities 4	1
261446	CPE	446	Information Systems	3
261447	CPE	447	Network and Information Security	3
269341	ISNE	341	Data Warehousing and Business Intelligence for Information Systems and Network Engineering	3
269360	ISNE	360	Platform Programming	3
269370	ISNE	370	Project Management for Information Systems and Network Engineering	3
269491	ISNE	491	Project Survey	1
-	-	-	Major Electives	3
				(Total) 20

The 4th year: First Semester				Credits
259192	ENGR	192	Student Quality Development through Activities 2	1
269430	ISNE	430	Wireless and Broadband Computer Networks	3
269470	ISNE	470	Information Technology Service Management	3

269492	ISNE	492	Project	3
-	-	-	Major Electives	3
-	-	-	GE Science & Mathematics	3
-	-	-	Free Electives	3
				(Total) 19
The 4th year: Second Semester				Credits
269495	ISNE	495	Cooperative Education	6
				(Total) 6

1. General Education:

1.1 Language and Communication:

- Listening and Speaking in English†
- Reading and Writing in English†
- Critical Reading and Effective Writing†
- English in Science and Technology Context†

1.2 Humanities and Social Science: (Select 3 subjects)

- Man and Philosophy
- Psychology and Daily Life
- Humanistic Arts
- Law and Modern World
- General Accounting
- Introduction to Entrepreneurship and Business
- Economics for Everyday Life
- Introduction to Communication

1.3 Science and Mathematics: (Select 2 subjects)

- Environmental Science in Today's World
- Science and Global Warming
- Life and the Universe
- Disaster Preparedness for Health and Life
- Basic Life Support and First Aid in Everyday Life
- Principles of Conservation
- Medications in Everyday Life
- Emergency Preparedness and Management
- Environmental Threat and Health
- Life and Alternative Energy

1.4 Learning through Activities:

- Learning through Activities
- Learning through Activities
- Learning through Activities

2. Field of Specialization:

2.1 Core Courses:

- Calculus for Engineering I
- Calculus for Engineering II
- Physics for Engineering and Agro-Industry Students I
- Quantitative Analysis in Industrial

- Network and Information Security†
- Information Systems and Network Engineering Laboratory I†
- Fundamentals of Data and Computer Communications†
- Web Programming Language†
- Information Systems and Network Engineering Laboratory II†
- Algorithms for Information Systems and Network Engineering
- Computer Architecture for Information Systems and Network Engineering†
- Data Centric Application Development†
- Data Warehousing and Business Intelligence for Information Systems and Network Engineering†
- Platform Programming†
- Project Management for Information Systems and Network Engineering†
- Wireless and Broadband Computer Networks†
- Information Technology Service Management†
- Project Survey†
- Project†

2.2.2 Major Electives:

- Parallel Processing and Distributed Systems†
- Wireless Computer Network System†
- Broadband Communication Network†
- Advanced Database Systems†
- Data Mining for Computer Engineering†
- Neural Networks†
- Artificial Intelligence †
- Digital Image Processing†
- Introduction to Computational Intelligence for Computer Engineering†
- Computer Simulation Modeling and Analysis†
- Computer Graphics†
- System Analysis and Design for Computer Engineering†
- Robotics†
- Computer-Aided Manufacturing†
- Real-Time Computer Control†
- Advanced Information Systems and Network Technology†

- Engineering†
- Engineering Materials
- Engineering Drawing
- Introduction to Information Systems and Network Engineering†
- Programming Languages for Information Systems and Network Engineering†

2.2 Major

2.2.1 Required Courses:

- Programming Language†
- Object-Oriented Programming Language†
- Data Structures and Algorithms†
- Operating Systems†
- Computer Networks†
- Computer Networks Laboratory†
- Fundamentals of Database Systems†
- Database System Laboratory†
- Software Engineering†
- Network Programming†
- Computer Network Design and Management†
- Information Systems†

- Information Systems and Network Engineering Training†
- Computer Network Traffic Analysis†
- Wireless Sensor Network†
- Peer-to-peer Systems†
- Introduction to Neuro-Fuzzy Systems†
- Mobile Application Development†
- Personal Software Process Improvement†
- Introduction to Human-Computer Interaction†
- Advanced Project Management for Information Systems and Network Engineering†
- Risk Management in Software Project†
- Seminar†
- Selected Topics in Information Systems and Network Engineering†
- Selected Topics in Information Systems I†
- Selected Topics in Information Systems II†
- Selected Topics in Network Engineering I†
- Selected Topics in Network Engineering II†

Normal Track



