Bachelor of Science Program in Information Technology

Study Plan for 651-xxxx students onward

(132 credits)

Year 1, Semester 1

Course Code	Course Title	Credits
ELE 1001	Communicative English I	3 (2-3-6)
BBA 1006	Essential Economics for Entrepreneurs	2 (2-0-4)
CSX 3001	Fundamentals of Computer Programming	3 (3-0-6)
ITX 3002	Introduction to Information Technology	3 (3-0-6)
ITX 2004	UI/UX Design and Prototyping	3 (3-0-6)
GE 1303	Science for Sustainable Future	2 (2-0-4)
	Total	**16 (15-3-32)**

Year 1, Semester 2

Course Code	Course Title	Credits
ELE 1002	Communicative English II	3 (2-3-6)
BBA 1004	Essential Marketing for Entrepreneurs	2 (2-0-4)
CSX 3002	Object-Oriented Concepts and Programming	3 (3-0-6)
ITX 2005	Design Thinking	3 (3-0-6)
ITX 3003	Business Systems	3 (3-0-6)
GE 1410	Thai for Profession Communication	2 (2-0-4)
or GE 1411	Thai Language for multicultural communication	2 (2-0-4)
or GE 1412	Introductory Thai Usage	2 (2-0-4)
	Total	**16 (15-2-32)**

Year 2, Semester 1

Course Code	Course Title	Credits
ELE 2000	Academic English	3 (2-3-6)
BBA 1005	Essential Finance for Entrepreneurs	2 (2-0-4)
CSX 2006	Mathematics and Statistics for Data Science	3 (3-0-6)
CSX 3003	Data Structures and Algorithms	3 (3-0-6)
ITX 3007	Software Engineering	3 (3-0-6)
	One Major Elective Course	3 (3-0-6)
	Total	**17 (16-3-34)**

Year 2, Semester 2

Course Code	Course Title	Credits
ELE 2001	Advanced Academic English	3 (2-3-6)
BBA 1007	Data Analytics for Entrepreneurs	3 (2-2-5)
CSX 2009	Cloud Computing	3 (3-0-6)
ITX 2007	Data Science	3 (3-0-6)
ITX 3006	Database Management Systems	3 (3-0-6)
	One Major Elective Course	3 (3-0-6)
	Total	**18 (16-5-35)**

Year 3, Semester 1

Course Code	Course Title	Credits
GE 2110	Human Civilizations and Global Citizens	2 (2-0-4)
CSX 3005	Computer Networks	3 (3-0-6)
ITX 2009	Presentation and Data Visualization Techniques	3 (3-0-6)
ITX 3004	Information Systems Analysis and Design	3 (3-0-6)
	One Major Elective Course	3 (3-0-6)
	One Free Elective Course	3 (3-0-6)
	Total	**17 (17-0-34)**

Year 3, Semester 2

Course Code	Course Title	Credits
ITX 4503	Information Systems Security	3 (3-0-6)
ITX 3008	IT Project Management	3 (3-0-6)
ITX 3009	Senior Project I	3 (0-9-0)
	Two Major Elective Courses	6 (6-0-12)
	Total	**15 (12-9-24)**

Year 4, Semester 1

Course Code	Course Title	Credits
GE 2202	Ethics	3 (3-0-6)
	Four Major Elective Courses	12 (12-0-24)
	One Free Elective Course	3 (3-0-6)
	Total	**18 (18-0-36)**

Year 4, Semester 2

Course Code	Course Title	Credits
ITX 3010	Senior Project II	3 (0-9-0)
	Two Major Elective Courses	6 (6-0-12)

Two Free Elective Courses	6 (6-0-12)
Total	**15 (12-9-24)**

List of Major Elective Courses

* Students are required to choose one concentration out of 6 concentrations and study 5 subjects (15 credits) from the chosen concentration and study 6 subjects (18 credits) from all major elective courses.

** Students are also required to study at least 5 CSX and/or ITX subjects (15 credits) out of 11 major elective courses (33 credits).

Major Elective Courses

Group 1(A): Software Engineering and Development

CSX 4107 Web Application Development	3 (3-0-6)
CSX 4109 Android Application Development	3 (3-0-6)
ITX 4103 Requirement Engineering	3 (3-0-6)
ITX 4104 Software Testing	3 (3-0-6)
ITX 4110 Enterprise System Integration	3 (3-0-6)
ITX 4111 Software Architectures	3 (3-0-6)
ITX 4518 Blockchain and Digital Currencies	3 (3-0-6)
ITX 4180-4199 Selected Topic [in Software Engineering]	3 (3-0-6)

Group 1(B): Informatics and Data Science

CSX 4201 Artificial Intelligence Concepts	3 (3-0-6)
CSX 4202 Data Mining	3 (3-0-6)
CSX 4211 Data Engineering	3 (3-0-6)
ITX 4212 Predictive Analytics	3 (3-0-6)
ITX 4213 Artificial Intelligence for Business	3 (3-0-6)
ITX 4214 Data Science Project Management	3 (3-0-6)
ITX 4215 Business Insights and Visualization	3 (3-0-6)
ITX 4280-4299 Selected Topic [in Data Science]	3 (3-0-6)

Group 1(C): Innovative Marketing Technology

CA 1103 Computer Graphic Design	3 (2-2-5)
CA 2110 Media Literacy and Ethical Concerns	3 (3-0-6)
CA 3100 Consumer Insight and Tools	3 (3-0-6)
CA 3111 Creative Entrepreneurial Project Management	3 (2-2-5)
ITX 4213 Artificial Intelligence for Business	3 (3-0-6)
ITX 4215 Business Insights and Visualization	3 (3-0-6)

ITX 4518 Blockchain and Digital Currencies	3 (3-0-6)
ITX 4900-4909 Selected Topic [in Marketing Technology]	3 (3-0-6)

Group 1(D): Innovative Food Technology

FT 4144 Food Ingredients Functionality	3 (3-0-6)
FT 4152 Bioinformatics for Food Technology	3 (3-0-6)
FT 4153 Integrated IOT to Smart and Green Food Industry	3 (3-0-6)
FT 4154 Intelligent Packaging Technology	3 (3-0-6)
ITX 4213 Artificial Intelligence for Business	3 (3-0-6)
ITX 4215 Business Insights and Visualization	3 (3-0-6)
ITX 4518 Blockchain and Digital Currencies	3 (3-0-6)
ITX 4910-4919 Selected Topic [in Food and Agriculture Technology]	3 (3-0-6)

Group 1(E): Innovative Music Technology

MB 3541 Online Social Media for Music Business	3 (3-0-6)
MB 3550 Feasibility Study for Music Entrepreneur	3 (3-0-6)
MB 3551 Creative Music Entrepreneurship	3 (3-0-6)
ITX 4213 Artificial Intelligence for Business	3 (3-0-6)
ITX 4215 Business Insights and Visualization	3 (3-0-6)
ITX 4518 Blockchain and Digital Currencies	3 (3-0-6)
ITX 4920-4929 Selected Topic [in Music Innovation]	3 (3-0-6)

Group 1(F): Innovative Financial Technology

IBE 2103 Business Finance	3 (3-0-6)
IBE 3101 Business Analysis	3 (3-0-6)
BFN 3211 Investment Strategy and Applied Valuation	3 (3-0-6)
BFN 4314 Personal Wealth Management and Financial Planning	3 (3-0-6)
BFN 4421 Portfolio Management and Analysis	3 (3-0-6)
BFN 4431 Startup Finance and FinTech	3 (3-0-6)
ITX 4213 Artificial Intelligence for Business	3 (3-0-6)
ITX 4215 Business Insights and Visualization	3 (3-0-6)
ITX 4518 Blockchain and Digital Currencies	3 (3-0-6)
ITX 4930-4939 Selected Topic [in Finance and Insurance Technologies]	3 (3-0-6)

Group 2

CSX 4108 iOS Application Development	3 (3-0-6)
CSX 4205 Big Data Analytics	3 (3-0-6)
CSX 4306 Internet of Things	3 (3-0-6)
CSX 4407 Enterprise Application Development	3 (3-0-6)

CSX 4514 Cross-platform Application Development	3 (3-0-6)
ITX 4106 Enterprise Architectures	3 (3-0-6)
ITX 4307 Business Continuity Planning and Management	3 (3-0-6)
ITX 4403 Manufacturing Management System	3 (3-0-6)
ITX 4404 Supply Chain Management System	3 (3-0-6)
ITX 4502 Tech Startup	3 (3-0-6)
ITX 4504 Digital Marketing	3 (3-0-6)
ITX 4505 Digital Transformation	3 (3-0-6)
ITX 4507 Information Retrieval and Search Engines	3 (3-0-6)
ITX 4508 Quantitative Research for Digital Business	3 (3-0-6)
ITX 4509 Cybersecurity	3 (3-0-6)
ITX 4510 Data Policies and Governance	3 (3-0-6)
ITX 4511 Internet of Behaviors	3 (3-0-6)
ITX 4512 Marketing Automation Systems	3 (3-0-6)
ITX 4513 Social Media Analytics	3 (3-0-6)
ITX 4517 Software Configuration Management	3 (3-0-6)
ITX 4519 Internetworking Workshop	3 (3-0-6)
ITX 4600-4699 Selected Topics	3 (3-0-6)