# **Bachelor of Science Program in Information Technology**

#### **Courses:**

# (1) General Education Courses:

#### 1.1 Humanities and Social Science Course

- Sufficiency Economy Philosophy for Sustainable Development
- Civic Literacy in Thai and Global Context
- Deigning Yourself and Personality for Leadership
- Smart Money Management
- Community Explorer and Service Learning
- Politics and Law in Everyday Life
- Philosophy, Religious and Life Style
- Principles of Logics and Thinking Skill for Lifelong Learning
- Human Relations and Personality Development
- Psychology in Daily Life
- ASEAN in the Modern World
- Civilization Studies
- Study Skills
- General Psychology
- Introduction to Sociology
- Principle of Economics

#### 1.2 Mathematics and Basic Science

- Digital Literacy for 21st Century
- Data Science and Visualization
- Green Technology for Sustainable Development
- Logic and Design Thinking for Innovation and Start up
- Internet of Thing for Everyone
- Living LAB for Campus Sustainability
- Information Technology
- Computer for Studies and Work
- Life and Environment
- Healthy Diet
- Chemistry in Daily Life
- Mathematics in Daily Life
- Statistics in Daily Life
- Mathematics in Civilization
- Statistics and Probability

#### 1.3 Language and Communication

- Thai Language for communication
- Daily Life English
- English for Academic Study

- Thai Language for Presentation
- English for Professional Presentation
- English for Proficiency Test
- Computer Coding for Everyone
- Chinese 1
- Chinese 2
- Japanese 1
- Japanese 2
- Korean 1
- Korean 2

#### 1.4 Physical Education and Aesthetics

- Life, Well-Being and Sports
- Art and Music Appreciation
- Thai Appreciation and Unseen in Siam
- Designing Your Dream
- Yoga, Meditation and Art of Living
- Creative Photography

# (2) Department Courses

### 2.1 Require Courses in Major Field

- Basic Mathematics
- Statistics and Probability
- Computer Programming Concept
- Business Process Management
- Management Information Systems
- Information Technology Professional Communication
- Operating System and Architecture
- Computer Project management
- Information Technology Laws and Ethics
- Information System Analysis and Design
- Data Structures and Algorithms
- Human-Computer Interaction
- Computer Programming
- Advanced Computer Programming
- Database Management
- Internet Programming
- Computer Network System
- Multimedia Design
- Data Communication and Networking
- Information Systems Security

# 2.2 Elective Courses in Major Field

- Information Technology Project 1
- Information Technology Project 2
- Co-operative Education Preparation
- Co-operative Education
- Network Administration
- Network Security Technology
- Selected Topics in Computer Network Administration

- Information System High Availability Planning
- Virtualization Technology
- Selected Topics in Computer Network Administration 2
- Computer Networking Design and Configuration
- Server Operating System
- Principle of Cloud Computing
- Information Technology Organization Behavior
- E-Business
- Decision Support Systems
- Software Engineering
- Object Oriented Design and Development
- Selected Topics in Information Technology Management
- Selected Topics in Software Development
- Application Development for Mobile Devices

#### **Website Design**

- Open Source Programming
- Software Testing and Quality Assurance
- Advance Internet Programming
- Advanced Database Design and Development
- Digital Marketing
- Data Warehouse Management
- Fundamental of Data Science
- Data Visualization
- Machine Learning
- Data Mining
- Big Data Analytic
- Business Intelligence
- Internet of Things
- Data Simulation and Modeling
- Selected Topics in Data Science 1
- Selected Topics in Data Science 2
- (3) Free Electives: select any courses which in bachelor's degree at Siam University