

Faculty of Sciences and Engineering (FSE)

Bachelor of Science In Data Science (B.Sc. in DAS)

I. Why Choose this Program?

Data Science is one of the most demanding majors in this digital economy world. In this major student learn how to collect, analyze, and interpret large amounts of data to support decision making and also solve complex problems. Students also develop skills in statistics, programming, blockchain, machine learning, and data visualization which are highly needed across industries.

II. Future Career Prospects

Graduates from this program will be able to pursue careers such as:

- Data Analyst
- Business Intelligence Analyst
- Research Analyst
- Machine Learning Engineer
- Data strategy Consultant

III. Course Structure

The four-year program consists of **120 credits** and is structured to provide students with a comprehensive academic foundation through a well-balanced curriculum of foundation, functional, pre-major, and major courses.

To fulfill the graduation requirements, students must successfully complete the following coursework:

YEAR 1		
Course Title	Credits	Priority
English I: Reading and Composition + Lab	4	Required
Gender Studies	3	Required
Khmer Studies	3	Required
Digital Literacy + Lab	4	Required
English II: Reading and Composition + Lab	4	Required
History of Cambodia	4	Required

Environmental Science	3	Required
Introduction to Political Science	3	Required
YEAR 2		
Course Title	Credits	Priority
Personal Growth and Development	4	Required
Introduction to Technology and Innovation	3	Required
Linear Algebra	4	Required
Introduction to Cyber Security	3	Required
Logic and Critical Thinking	3	Required
Discrete Mathematics	3	Required
Data Structure and Algorithm	3	Required
Computer Programming I	4	Required
Database Design	3	Required
YEAR 3		
Course Title	Credits	Priority
Web Application Development	3	Required
Computer Programming II	3	Required
Database Management System	3	Required
Cloud Computing	3	Required
Big Data Technology	3	Required
Introduction to Ethics and Good Governance	3	Required
Statistics for Science	3	Required
Introduction to IoT	3	Required
Network System Administration	3	Required
Object Oriented Programming	3	Required

YEAR 4		
Course Title	Credits	Priority
Data Analysis and Visualization	3	Required
Dashboarding & BI Tools	3	Required
UI/UX Design	3	Required
Data Mining	3	Required
Mobile Application Development	3	Required
Research Methodology	3	Required
Blockchain and Distributed Ledger	3	Required
AI and Machine Learning	3	Required
Digital Product Innovation & Entrepreneurship	3	<i>Elective</i>
Software Engineering	3	<i>Elective</i>
Blockchain and Distributed Ledger	3	<i>Elective</i>
Big Data Technologies	3	<i>Elective</i>
Computer Vision	3	<i>Elective</i>
Data Analysis and Visualization	3	<i>Elective</i>

****Note:** Students need to choose **ONE** elective course.*

GRADUATION PATH		
Option I: Senior Project	6	Required
Option II: Internship	6	Required
Option III: Exit Exam	6	Required

****Note:** Graduation Path: Students choose only **ONE** option.*