INTELLIGENT SYSTEMS PROGRAMMING CERTIFICATE

Division: Business and Computer Information Systems

PROGRAM CODE: 2C46113

The Intelligent Systems Programming Certificate is designed to prepare students for careers in the growing fields of artificial intelligence (AI), machine learning (ML), and intelligent systems development. This program provides students with the foundational knowledge and practical skills needed to design, develop, and deploy intelligent systems used in industries such as healthcare, finance, robotics, drones, autonomous vehicles, and the Internet of Things (IoT). This certificate requires 23-25 units. A grade of C or better is required in each course taken.

Code	Title	Units
Required Courses (21 units)		
BUS 188 F	Introduction to the Internet of Things Product Development	3
BUS 271 F	Leadership and Business Ethics	3
or CYBR 206 F	Ethical Hacking	
or PHIL 160 F	Introduction to Ethics	
CIS 201 F	Introduction to Python Programming	3
CIS 210 F	Advanced Python Programming	3
CIS 212 F	Robotic Programming	3
CIS 230 F	PHP and MySQL Programming	3
CYBR 106 F	Introduction to Cybersecurity	3
Restricted Electives (2-4 units)		**2-4**
BUS 295 F	Business Internship (formerly BUS 061 F)	2-4
CIS 235 F	Introduction to Cloud Computing	3
CIS 295 F	Computer Information Systems Internship	2-4
Total Units		**23-25**

Program Level Student Learning Outcomes

Outcome 1: Write, test, and debug programs using programming languages and frameworks commonly used in intelligent systems development.

Outcome 2: Design, develop, and optimize intelligent systems for applications such as robotics, drones, IoT devices, and autonomous systems.

Outcome 3: Demonstrate an understanding of ethical considerations and best practices in deploying AI technologies.