

# EMERGING TECH ENTREPRENEURSHIP - CERTIFICATE OF ACHIEVEMENT LEVEL 2

|                             |  |    |
|-----------------------------|--|----|
| CIS 059                     | Object Oriented Design and Programming | 3  |
| CIS 060                     | Systems Analysis and Design            | 3  |
| CIS 073                     | Visual Basic Programming               | 3  |
| CIS 084                     | Java Programming                       | 3  |
| Total Units for Certificate |  | 18 |

Students who complete the Emerging Tech Entrepreneurship certificates will be exposed to and become proficient in the coursework to become entrepreneurs in a technical field. This program combines the business skills necessary to make sound business decisions with the technical know-how to survive in the 21st century. Students will learn how to build and manage successful modern technical businesses.

## Program Learning Outcomes

- Create and produce documentable solutions to business problems and challenges.
- Identify key issues, research relevant data, and show evidence of analytical thinking about possible solutions for business opportunities and problems.
- Demonstrate knowledge of the influence of the Internet on business and terms relating to the World Wide Web.
- Demonstrate understanding of the impact and application of computers in business, government, and social organizations.
- Work and interact effectively in teams consisting of individuals with differing interests, gender, global backgrounds and professions.
- Create user interfaces and algorithms to solve business problems and user needs.

## Certificate Requirements

| Course  | Title  | Credits |
|---|--|---------|
| Computer Programming  |  |         |
| CIS 106   | Technest 1: Intro to Coding, Programming Concepts & Methods (python) | 3       |
| or CIS 024C   | Python Programming   |         |
| Data Science  |  |         |
| CIS 107   | Technest 2: Data Science   | 3       |
| Internet of Things  |  |         |
| CIS 108   | Technest 3: Internet of Things                                       | 3       |
| Business and Entrepreneurship   |  |         |
| BUS 068   | Entrepreneurship and Small Business Management                       | 3       |
| BUS 082   | Introduction to Business   | 3       |
| Course to enhance understanding of either data or programming (choose one): |  |         |
| CIS 020   | XML Fundamentals   | 3       |
| CIS 020A  | Advanced XML   | 3       |
| CIS 022   | Database Technology  | 3       |
| CIS 024A  | Perl Programming   | 3       |
| CIS 024B  | PHP Programming  | 3       |
| CIS 036   | Web 2.0 Programming  | 3       |
| CIS 047   | Introduction to Web Development                                      | 3       |
| CIS 054   | C/C++ Programming  | 3       |
| CIS 055   | Data Structures: Programming   | 3       |