**BS Information Technology**

**NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Minor:**  (16-18 elective credits)

**Check off what you have taken:**

**1st Year Requirements: General Education:**

|  |  |  |  |
| --- | --- | --- | --- |
| **1ST Year Experience Courses****Required** | **🗹** | **Year 1****Major Required Courses** | **🗹** |
| EN1200 | Composition |  | CS2010 | Computing Fundamentals |  |
| MA­­­­1800  | College Algebra (if needed to get into Pre-calculus) |  | CS2370 | Introduction to Programming |  |
| MA2140 orMA2550 | Pre-calculus or Calculus |  | MA2250/MA2300 | Mathematics for Computer Scientists/or Finite Math |  |
| IS1111 | First Year Seminar |  |

|  |  |  |
| --- | --- | --- |
| **Attribute** | **1** | **2** |
| Creative Thought Direction |  |  |
| Past & Present Direction |  |  |
| Scientific InquiryDirection |  |  |
| Self & Society Direction |  |  |
| Global Awareness Connection |  |
| WellnessConnection |  |

**2nd Year Requirements:**

|  |  |
| --- | --- |
| **Year 2****Major Recommended Courses** | **🗹** |
| CS2220 | Computer Hardware(Recommended to take in Spring) |  |
| CS3240 | Data Communication and Computer Networks |  |
| CS3600 | Database Management Systems(Recommended to take in Fall) |  |
| MA2300 | Statistics(Recommended to take in Spring) |  |
| MA2140 orMA2550 | Pre-calculus orCalculus(Recommended to take in Fall) |  |

**THIS IS THE RECOMMENDED COURSE SEQUENCE FOR THE 18/19 CATALOG. YOU HAVE THE OPTION OF SWITCHING IF YOU WOULD LIKE. IF YOU WANT TO, HERE IS THE LINK TO THE CHANGE CATALOG FORM:**

<https://campus.plymouth.edu/registrar/wp-content/uploads/sites/145/2017/02/Change-Catalog.pdf>

Make sure you have at least 15 credits (5 courses min).

To complete a full schedule fill in with:

General Education Courses (Directions or Connections)

Minor courses

Other courses of interest

MATH SEQUENCE

If you have taken MA1800→Take MA2140

If you have taken MA2140→Take MA2550

**SCHEDULE WORKSHEET**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **CRN** | **Course ID** | **TITLE** | **Cr.** | **Days** | **Times** |
| 1 |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

**PIN#\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Registration Date: \_\_\_\_\_\_at 9:00AM**

Department of Computer Science and Technology

**College of Arts of Sciences**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**INFORMATION TECHNOLOGY**, Bachelor of Science 120 credits

This program focuses on the application and utilization of computing technology in a wide variety of Information Technology environments. Besides a solid core of fundamental computing courses, this program is to focus on real and current applications in several areas of Information Technology such as internet, big data, computer networks, computer security, and system analysis and administration.

**Degree Requirements Credits**

CS 2010 Computing Fundamentals (TECO) 3

CS 2220 Computer Hardware 3

CS 2370 Introduction to Programming 4

CS 3240 Data Communication and Computer Networks 3

CS 3420 Introduction to Cybersecurity 3

CS 3600 Database Management Systems 4

CS 3650 Big Data Analytics 3

CS 3720 Systems Analysis and Design 3

CS 3820 Human-Computer Interaction 3

CS 4230 System Administration 4

CS 4400 Computer Networks and Protocols 4

CS 4420 Computer Security 3

CS 4520 CyberEthics (DICO) (INCO) (WRCO) 3

CS 4760 Senior Project 3

 46

Information Technology Major Electives - complete two of the following: 5-6

 CS 2470 Systems Programming in C/C++

 CS 2381 Data structure and intermedia programming

 CS 2521 Introduction to Electromechanical Technology

 CS 2525 Microprocessors and Digital Systems

 CS 3015 Mobile Application Development

 CS 3020 Web Programming

 CS 3030 Advanced Web Programming

 CS 4140 Software Engineering

 CS 4500 Topics in Computer Science and Technology

 CS 4920 Computer Science Internship (maximum of three credits)

CM 3090 Technical Communication 3

54-55

MA Math elective MA 1800, MA 2140 or above [not MADI]\* 3-4

MA 2200/MA 2250 Finite Math or Math for Computer Science 3

MA 2300 Statistics I (QRCO) 3

Complete one of the following: 4

 MA 2140 Precalculus

 MA one semester of Calculus 13-14

*General Education:*

EN 1200 Composition 3

IS 1111 The First Year Seminar:

 Critical Thinking and the Nature of Inquiry 3

CTDI Creative Thought Directions 6

PPDI Past and Present Directions 6

SIDI Scientific Inquiry Directions 6-8

SSDI Self and Society Directions 6

GACO Global Awareness Connection 3

WECO Wellness Connection 3

 36-38

*Electives*  17-13

Total 120

\*Cannot double count MA 2140 or calculus.

**Recommended Course Sequence**

Check all course descriptions for prerequisites before planning course schedule. *Course sequence is suggested but not required.*

# Year One Credits

EN 1200 Composition 3

IS 1111 The First Year Seminar:

 Critical Thinking and the Nature of Inquiry 3

CS 2010 Computing Fundamentals (TECO) 3

CS 2370 Introduction to Programming 4

MA Math elective MA 1800, MA 2140 or above [not MADI] 3-4

MA 2200/MA 2250 Finite Math/Math for Computer Science 3

CTDI Creative Thought Directions 6

SSDI Self and Society Directions 6

 31-32

# Year Two Credits

CS 2220 Computer Hardware 3

CS 3600 Database Management Systems 4

MA 2300 Statistics I (QRCO) 3

MA 2140 or one semester of Calculus 4

PPDI Past and Present Directions 6

SIDI Scientific Inquiry Directions 6-8

GACO Global Awareness Connection 3

 29-31

**Year Three Credits**

CS 3240 Data Communication and Computer Networks 3

CS 3420 Introduction to Cybersecurity 3

CS 3650 Big Data Analytics 3

CS 3720 Systems Analysis and Design 3

CS 4400 Computer Networks and Protocols 4

Information Technology Major Elective 2-3

CM 3090 Technical Communication 3

WECO Wellness Connection 3

 Electives 6

 30-31

**Years Four Credits**

CS 3820 Human Computer Interaction 3

CS 4230 System Administration 3

CS 4520 CyberEthics (DICO) (INCO) (WRCO) 3

Information Technology Major Elective 3

CS 4420 Computer Security 3

CS 4760 Senior Project 3

 Electives 8-12

 26-30

Total 120