**2022 VMS BSCS Study Plan  
(for 65x students)**

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| **Year 1, Semester 1** | | |
| **Course Code** | **Course Title** | **Credits** |
| ELE 1001  BBA 1001 | Communicative English I  Business Exploration | 3 (3-2-6)  3 (3-0-6) |
| CSX 3001 | Fundamentals of Computer Programming | 3 (3-0-6) |
| ITX 3002 | Introduction to Information Technology | 3 (3-0-6) |
| MA 1200 | Mathematics for Business | 3 (3-0-6) |
|  | **Total** | **15 (15-2-30)** |
|  |  |  |
| **Year 1, Semester 2** | | |
| **Course Code** | **Course Title** | **Credits** |
| ELE 1002 | Communicative English II | 3 (3-2-6) |
| CSX 2003 | Principles of Statistics | 3 (3-0-6) |
| CSX 3002 | Object-Oriented Concepts and Programming | 3 (3-0-6) |
| IBE 1122 | Accounting for Entrepreneurs | 3 (3-0-6) |
| ITX 2005 | Design Thinking | 3 (3-0-6) |
|  | **Total** | **15 (15-2-30)** |

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| **Year 2, Semester 1** | | |
| **Course Code** | **Course Title** | **Credits** |
| ELE 2000 | Academic English | 3 (3-2-6) |
| CSX 2006 | Mathematics and Statistics for Data Science | 3 (3-0-6) |
| CSX 2008 | Mathematics Foundation for Computer Science | 3 (3-0-6) |
| CSX 3003 | Data Structures and Algorithms | 3 (3-0-6) |
| CSX 3005 | Computer Networks | 3 (3-0-6) |
| ITX 2007 | Data Science | 3 (3-0-6) |
|  | **Total** | **18 (18-2-36)** |
|  |  |  |
| **Year 2, Semester 2** | | |
| **Course Code** | **Course Title** | **Credits** |
| ELE 2001 | Advanced Academic English | 3 (3-2-6) |
| GE 1302 | Ecology and Sustainability | 3 (3-0-6) |
| CSX 2009 | Cloud Computing | 3 (3-0-6) |
| CSX 3004 | Programming Languages | 3 (3-0-6) |
| CSX 3006 | Database Systems | 3 (3-0-6) |
|  | One Major Elective Course | 3 (3-0-6) |
|  | **Total** | **18 (18-2-36)** |

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| **Year 3, Semester 1** |  |  |
| **Course Code** | **Course Title** | **Credits** |
| GE 1403  or GE 1408 | Communication in Thai  Thai Usage | 3 (3-0-6)  3 (3-0-6) |
| or GE 1409 | Thai Language for intercultural communication | 3 (3-0-6) |
| CSX 3007 | Computer Architecture | 3 (3-0-6) |
| CSX 3008 | Operating Systems | 3 (3-0-6) |
|  | Two Major Elective Courses | 6 (6-0-12) |
|  | One Free Elective Course | 3 (3-0-6) |
|  | **Total** | **18 (18-0-36)** |
|  |  |  |
| **Year 3, Semester 2** |  |  |
| **Course Code** | **Course Title** | **Credits** |
| GE 2102 | Human Heritage and Globalization | 3 (3-0-6) |
| CSX 3009 | Algorithm Design | 3 (3-0-6) |
| CSX 3010 | Senior Project I | 3 (0-9-0) |
|  | Two Major Elective Courses | 6 (6-0-12) |
|  | One Free Elective Course | 3 (3-0-6) |
|  | **Total** | **18 (15-9-30)** |
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| **Year 4, Semester 1** |  |  |
| **Course Code** | **Course Title** | **Credits** |
| GE 2202 | Ethics | 3 (3-0-6) |
|  | Four Major Elective Courses | 12 (12-0-24) |
|  | One Free Elective Course | 3 (3-0-6) |
|  | **Total** | **18 (18-0-36)** |
| **Year 4, Semester 2** |  |  |
| **Course Code** | **Course Title** | **Credits** |
| CSX 3011 | Senior Project II | 3 (0-9-0) |
|  | Two Major Elective Courses | 6 (6-0-12) |
|  | One Free Elective Course | 3 (3-0-6) |
|  | **Total** | **12 (12-9-18)** |