**Masters Degree Course Checklist**

**Course Requirements**

**Background Courses** ………………………………………………. Up to 15 units

**Core Courses** ………………………………………………………... 12 units

**Major (Specialization) Courses** ……………………………………15 units

**Elective Courses** ……………………………………………………. 3 units

**Capstone Project** ………………………………………………….... 6 units

**Background Courses (for non IT/CS/IS/IM graduates)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Course No.** | | **Descriptive Title** | **Units** |
|  | IT 131  ICS 322 | Computer Architecture | 3 |
|  | IT 222  ICS 311 | Operating Systems | 3 |
|  | IT 315  ICS 321 | Database Management Systems | 3 |
|  | IT 325N  IT 413 | Software Engineering | 3 |
|  | IT 112  IT 122  IS 112  IS 122  ICS 112  ICS 122 | Introduction to Programming 1/Programming 2 | 3 |
|  | IT 322  ICS 322 | Computer Networks and Data Communication | 3 |

Core Courses

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course No.** | | **Descriptive Title** | **Prerequisites** | **Units** |
|  | MIT 101 | Computer Networks Administration and Network Security Management | IT 222 / ICS 311  (Operating Systems) | 3 |
|  | MIT 102 | Advanced Database Management Systems | IT 315 / ICS 321  (Database Management Systems) | 3 |
|  | MIT 103 | Advanced System Design and Modeling | IT 325N / IT 413  (Software Engineering) | 3 |
|  | MIT 104 | IT Project Management |  | 3 |
| **Total Units Required** | | | | 12 |

**Major (Specialization) Courses**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course No.** | | **Descriptive Title** | **Prerequisites** | **Units** |
|  | MIT 111 | Interactive Multimedia |  | 3 |
|  | MIT 112 | Information Resource Management & Data Security |  | 3 |
|  | MIT 113 | Web Concepts and Technologies |  | 3 |
|  | MIT 114 | E-Commerce Systems |  | 3 |
|  | MIT 115 | Theory of Programing Languages | IT 112 / IT 122 / IS 112  IS 122 / ICS 112 / ICS 122  (Introduction to Programming 1 / Programming 2) | 3 |
|  | MIT 116 | Advanced Software Engineering | IT 325N / IT 413  (Software Engineering) | 3 |
|  | MIT 117 | Graph Theory |  | 3 |
|  | MIT 118 | High Performance Computing | IT 131 / ICS 222  (Computer Architecture) | 3 |
|  | MIT 119 | IT Problem and Change Management |  | 3 |
|  | MIT 120 | Distributed Systems | IT 222 / ICS 311  (Operating Systems) |  |
|  | MIT 121 | Computer and Cyber Ethics |  | 3 |
| **Total Units Required** | | | | 15 |

**Elective Courses**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course No.** | | **Descriptive Title** | **Prerequisites** | **Units** |
|  | MIT 122 | IT Special Topics |  | 3 |
|  |  | Any major course from MIT or any courses from MISSME |  | 3 |
| **Total Units Required** | | | | 6 |

**Elective Courses**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course No.** | | **Descriptive Title** | **Prerequisites** | **Units** |
|  | MIT 299A | Capstone Project 1 | Public Lecture | 3 |
|  | MIT 299B | Capstone Project 2 | MIT 299A  (Capstone Project 1) | 3 |
| **Total Units Required** | | | | 6 |