

Master of Science in Applied Computer Science



Computer Science Core Courses

9

OR

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| CPTR 575 | Issues in Computer Science and Religion | 3 |
| CPTR 597 | Field Practicum | 6 |
| CPTR 598 | Project | 6 |

Certificate Courses

24

Select two of three certificates:

Cyber Security Certificate

12

Prerequisite: One year of programming or CPTR 502 Foundations of Software Development and CPTR 328 Principles of Networking or equivalent course

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| CPTR 534 | Advanced Network and Server Administration | 3 |
| CPTR 544 | Offensive Cybersecurity | 3 |
| CPTR 545 | Defensive Cybersecurity | 3 |
| CPTR 554 | Cyber Forensics | 3 |

Data Analytics Certificate

12

Prerequisites: Undergraduate statistic course (equivalent to MATH 215) and one year of programming or CPTR 502 Foundations of Software Development

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| CPTR 512 | Programming in Data Analytics | 3 |
| CPTR 519 | Databases and Data Warehouses | 3 |
| CPTR 524 | Data Mining and Analytics | 3 |
| CPTR 528 | Data Visualization | 3 |

Web Development Certificate

12

Prerequisite: One year of programming or CPTR 502 Foundations of Software Development

OR

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|----------|--------------------------------|---|
| CPTR 526 | User Experience | 3 |
| CPTR 546 | Web Services | 3 |
| CPTR 556 | Front-end Web Development | 3 |
| CPTR 519 | Databases and Data Warehouses | 3 |
| CPTR 535 | Mobile Application Development | 3 |

Total Hours 33