

Master of Science in Accounting Analytics

The Master of Science in Accounting Analytics degree combines courses from Accountancy, Computer Information Systems, Finance, Information and Process Management, and Mathematical Sciences to prepare students for data-rich, technology-intensive careers in public accounting or corporate settings. The STEM-designated degree, the first of its kind in New England, consists of ten courses and can be completed in one year by students with appropriate accounting preparation.

The MSAA program provides graduates with a unique skill set designed to fulfill the growing demand by professional accounting and corporate employers for new staff members with deep and integrated accounting, technology and analytics knowledge. Students will find the program a valuable alternative to meeting the 150-hour requirement for CPA certification (<https://www.aicpa.org/becomeacpa/gettingstarted.html>). The program also provides opportunities for those not seeking CPA certification and experienced staff who are seeking to enhance their skills and knowledge. The degree also prepares graduates to sit for other globally recognized credentials such as the Certified Information System Auditor (<http://www.isaca.org/Certification/CISA-Certified-Information-Systems-Auditor/Pages/default.aspx>) (CISA) designation.

| Course | Title | Credits |
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| Pre-Program Foundation Courses (18 credits) | | |
| Students with the appropriate background may be waived from the following courses: | | |
| GR 521 | Managerial Statistics | 3 |
| AC 611 | Financial Accounting Problems I | 3 |
| AC 612 | Financial Accounting Problems II | 3 |
| AC 730 | Business Processes and Systems Assessment | 3 |
| AC 741 | Financial Statement Auditing | 3 |
| IDCC 620 | Managerial Communication | 3 |
| or | | |
| IDCC 711 | Argumentation Strategies for Business | 3 |
| REQUIRED COURSES (24 credits) | | |
| Analytics Core | | |
| CS 605 | Data Management and SQL for Analytics | 3 |
| IPM 652 | Managing with Analytics | 3 |
| ST 625 | Quantitative Analysis for Business | 3 |
| Accounting Analytics Core | | |
| AC 777 | Accounting Analytics in Practice | |
| AC 742 | Information Technology Auditing | 3 |
| FI 631 | Financial Modeling | 3 |
| MA 705 | Data Science | 3 |
| ST 635 | Intermediate Statistical Modeling for Business | 3 |

ELECTIVE COURSES (6 credits)

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| AC 701 | Internship in Accounting Practice | 3 |
| AC 731 | Advanced Accounting Information Systems: Modeling Effective Accounting Systems | 3 |
| AC 772 | Principles of Fraud Investigation | 3 |
| AC 773 | Fraud and Forensic Accounting | 3 |
| AC 793 | Professional Accounting Research and Policy | 3 |
| CS 602 | Data-Driven Development With Python | 3 |
| CS 603 | Object-Oriented Application Development | 3 |
| CS 650 | Data Management Architectures | 3 |
| CS 733 | Artificial Intelligence Techniques and Applications | 3 |
| CS 753 | Business Intelligence Methods and Technologies | 3 |
| IPM 723 | Information Security, Controls and Ethics | 3 |
| IPM 740 | Enterprise Systems Planning and Configuration | 3 |
| MA 707 | Introduction to Machine Learning | 3 |

Please note: All course work must be completed within five years.