100% ONLINE

MS IN COMPUTER AND INFORMATION TECHNOLOGY (ONLINE)

Empower yourself to make big impacts in the field of computer and information technology (CIT) with a 100% online Master's of Science in Computer and Information Technology from Purdue. In our highly-networked world, CIT experts are invaluable contributors to every industry -- from government to healthcare and academia. CIT skills are a major asset to professionals looking to expand their career opportunities or move forward in their current roles.

This innovative, 100% online program allows you to build marketable skills while studying from anywhere. The program's flexibility is convenient to working professionals and any student with a busy schedule. All courses are taught by expert Purdue faculty and online students receive the same degree as on-campus students. Same training, same degree, 100% online.

CONCENTRATIONS

Customize your online Master's in Computer and Information Technology by choosing from two concentrations: IT Project Management and Business Analysis in IT.

IT PROJECT MANAGEMENT

The concentration in IT Project Management prepares students to manage complex, dynamic projects in an information technology context. The endurance of remote work and virtual collaboration tools have made IT Project Management an essential skill in the modern workforce. This 100% online concentration features material included

in the Body of Knowledge developed by the Project Management Institute (PMI®) —including requirements discovery and management, schedule development and management, portfolio management, and management of outsourced resources.

BUSINESS ANALYSIS IT

The concentration in Business Analysis IT prepares students to enable change in organizations by utilizing methods, tools, and techniques to define needs and identify solutions that deliver value to those organizations. Students learn the critical skills of soliciting and analyzing requirements, mining and analyzing data, investigating and defining business problems, managing a project and change initiatives, analyzing risks including cybersecurity, and working in agile and DevOps teams. This 100% online concentration features an IIBA® & PMI® based curriculum.

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PLAN OF STUDY

The MS in Computer and Information Technology courses are offered in a rolling format, 100% online, that lets you progress through the program at your own pace. Courses are offered in an eight-week format for greater flexibility, so you can complete the required 34 credit hours (30 if you're already certified Business Analyst or PMP certified) in 12 months to 5 years.

CORE COURSES

CNIT 55200 PME - IT Project Management
Understand maturity models such as CMMI and OPM3; quality assurance and its control and application; quality improvement methods and techniques such as Six Sigma, TQM and CPI; and application of quality management work products. Develop the ability to select and apply best practices and tools in quality management. (3 credits; 1st 8 weeks)

CNIT 52600 PLE - IT Policy, Law & Ethics
This is a review and explanation of current legislation affecting IT and a discussion of Green IT. Studies on IP, copyrights, policy statements, and employee and organizational liability. Emphasis on ethics and privacy issues. (3 credits; 2nd 8 weeks)

OLS 58000 - Interpersonal & Group Skills for Leaders
Develop skills necessary to be a strong leader, including understanding interpersonal behavior, managing conflicts, communication ability in many settings, building relationships in business and family, and problem solving and decision making in group and team processes. Understand the importance of diversity and cultural awareness. (3 credits)

CNIT 52700 PRC - Professional Research & Communication
Develop the ability to select and apply best practices in researching technical information, writing project-related documents and creating effective presentations. (1 credit; 1st 8 weeks)

COURSES
(CONCENTRATION: BUSINESS ANALYSIS IT)

CNIT 53000 BAE - Business Analysis Essential
Students learn the foundational knowledge needed to effectively perform skills, techniques, methods, and processes used by the Business Analysis profession and based on the Business Analyst Body of Knowledge (BABOK) and PMI Professional in Business Analysis (PMI-PBA). (3 credits; 1st 8 weeks)

CNIT 53100 RMA - IT Requirements Analysis & Modeling
Students learn how to effectively model and analyze stakeholder requirements in order to define a workable solution. (3 credits; 2nd 8 weeks)

CNIT 53200 EA - IT Enterprise Analysis
Students learn how to identify and define business needs and define solutions to satisfy those needs. In addition the areas of problems definition and analysis, business case development, and feasibility studies will be covered. (3 credits; 2nd 8 weeks)

CNIT 53500 ABA - Advanced Topics in IT Business Analysis
This course is designed to acquaint the student with the newest advances and techniques in business analysis as well as dealing with contemporary issues affecting BA process. Best practices, use of social media, cultural awareness and virtual teaming techniques are covered. (3 credits; 2nd 8 weeks)

CNIT 57000 BDA - IT Data Analytics
Students learn decision strategies, Big Data concepts, plus Business and data analytics through the use of statistical inference, regression, predictive analytics, and data mining. Students will have "hands-on" opportunities through the use of a tool such as "R", (an open source domain specific language (DSL) to assist in those efforts. (3 credits; 2nd 8 weeks)

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COURSES
(CONCENTRATION: IT PROJECT MANAGEMENT)

CNIT 58000 ATP - Advanced Topics in IT Project Management
Covers effective management of global and troubled projects. Understand importance of cultural awareness and diversity and contemporary issues that affect project management. Learn about the effective use of social media in project management. Select and apply best practices in virtual teaming. (3 credits)

CNIT 55100 EPM - IT Economics
Develop an understanding of contracts and the management of contractors and subcontractors. Gain the tools to effectively understand and use IT economic work products and select best practices in contract management and IT economics, leading to effective decision making. (3 credits)

CNIT 58200 EST - IT Estimating-Scheduling-ControL
Learn how to build a better business case, effectively using sound estimating strategies. Effectively perform cost management and develop project schedules using advanced project management techniques. Develop the ability to select and apply best practices for project estimating, scheduling and control. (3 credits)

CNIT 58300 PPM - IT Program & Portfolio ManagemenT
Learn program and portfolio management versus project management. Gain a knowledge of project governance. Understand the project management office (PMO) and strategies for implementation. Understand project management information systems (PMIS). (3 credits)

CNIT 58600 RMP - IT Requirements Management
Explore the requirements management lifecycle. Develop abilities to elicit and document user requirements in a manner to assure project success. Understand the processes of requirements validation, verification and traceability. Develop a knowledge of requirements management tools for effective use.

CNIT 58500 PCM - Organizational and Change Management for IT Project
Understand the application of a project management framework, select and apply the best practices, learn the necessary artifacts to initiate, plan, execute, control and close projects. Effective use of PM tools to manage projects. (3 credits; 2nd 8 weeks)

ELECTIVE COURSES

CNIT 58100 PRM - Risk Management
Learn to understand and apply qualitative and quantitative risk management techniques and perform risk-based simulations. Understand disaster planning and business continuity and develop techniques to effectively accomplish both. (1 credit; 2nd 8 weeks)

CNIT 58100 PQM - Project Quality Management
Develop an understanding and the ability to apply change management, configuration management and formal change control processes. Understand process management and business process reengineering and develop a knowledge of change management work products. (1 credit; 1st 8 weeks)

CNIT 55300 QMX - IT Quality Management
Understand maturity models such as CMMI and OPM3; quality assurance and its control and application; quality improvement methods and techniques such as Six Sigma, TQM and CPI; and application of quality management work products. Develop the ability to select and apply best practices and tools in quality management. (3 credits)

CNIT 58100 ITS - IT Security Management
Understand current security technologies and the different types of security (operating system, network, database and information). Learn to develop and manage security policies and procedures and understand cryptographic and biometric security methods. Discuss computer crime and the importance of incident reporting and security auditing and training. (1 credit)

CNIT 58100 PMP - Project Management Professional (PMP) Certification Prep
Understand PMI's PMBOK and prepare for taking PMI's PMP certification. (1 credit)

CNIT 58100 CBA - CBAP and PBA Certification Prep
Students learn the requirements for obtaining CBAP and PBA certification as well as learn study tips and exam taking tips, and have the opportunity to take practice certification exams. (1 credit; 2nd 8 weeks)

NOTE: All courses are subject to change and semester availability may vary.

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