College Catalog
College of Information Systems

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The mission of the College of Information Systems is to prepare its students to effectively function in the rapidly changing information technology field. Our student-centered philosophy uniquely serves those information systems students who have traditionally been underserved due to limitations of time, distance, and/or occupation. Using appropriate delivery systems, our degree programs emphasize the management of emerging information technologies within the social and structural interfaces of organizations.

General Education (GE) Requirements

The purpose of Trident University's GE requirements is to provide the foundation for a well rounded higher education allowing graduates from TUI's bachelors programs to better understand how their core curriculum integrates with modern society. The subject areas required for study in the GE program round out a higher education in one of the more specific specialized curriculums offered by the University. Areas of study in English Composition, Mathematics, Arts & Humanities, Physical & Biological Sciences and Social & Behavioral Sciences prepare students for a fulfilling life as responsible citizens able to meet the work requirements of today's society.

Upon successful completion of general education requirements students should be able to:

1. Apply methods for using resources.
2. Demonstrate effective written communication skills.
3. Work effectively in collaboration with others.
4. Apply ethical practice in decision making.
5. Assess real world situations in order to make appropriate decisions.
6. Analyze the impact of human expressions on culture.

In order to satisfy the University's GE requirements students must fulfill the course requirements indicated in the five (5) competency areas listed below and complete a total of 45 semester credit hours (or equivalent) in these areas:

Competency Area	Number of courses	Minimum Credit Hours
English Composition	2	6
College Mathematics	1	3
Arts/Humanities	3	9
Physical & Biological Sciences	2	6

Social & Behavioral Sciences	4	12

*Note: Students who meet the course requirements above but do not have 45 semester credit hours of GE must fulfill the remaining GE credit hour requirement in any of the above 5 competency areas.

General Education Courses Offered by TUI

ANT250 I - Anatomy and Physiology I	4 Credits	Description
ANT250 II - Anatomy and Physiology II	4 Credits	Description
ART101 - Art History	4 Credits	Description
BSC303 - Speech/Communication in Health	4 Credits	Description
BUS205 - Business Law	4 Credits	Description
CHS 200 - Critical Thinking for Health Care Professionals	4 Credits	Description
CHS 202 - Health and Society	4 Credits	Description
ECO201 - Microeconomics	4 Credits	Description
ECO202 - Macroeconomics	4 Credits	Description
ENG101 - English Composition I	4 Credits	Description
ENG102 - English Composition II	4 Credits	Description
ENG201 - American Literature	4 Credits	Description
HIS101 - Modern World History	4 Credits	Description
MAT101 - College Mathematics	4 Credits	Description
MAT201 - Basic Statistics	4 Credits	Description
MAT202 - Advanced Mathematics	4 Credits	Description
MAT275 - Linear Algebra	4 Credits	Description
MIC100 - Microbiology	4 Credits	Description
PHI201 - Introduction to Philosophy	4 Credits	Description
POL201 - Global Politics in the Modern World	4 Credits	Description
PSY101 - Introduction to Psychology	4 Credits	Description
SCI201 - Applied Physics I	4 Credits	Description

SCI202 - Applied Physics II	4 Credits	Description
SCI204 - Applied Scientific Theory	4 Credits	Description
SOC201 - Introduction to Sociology	4 Credits	Description
STS401 – Business Statistics	4 Credits	Description
SVC101- Introduction to Speech and Verbal Communications	4 Credits	Description

Transfer Policy for undergraduate programs

- The transferring institution must be an accredited college/ university.
- TUI will accept up to 88 semester credits from an accredited college/university.
- TUI may, after review, approve other transfer credits such as ACE, CLEP, DANTES, etc.
- The transferred course must meet the same general content standards as the TUI course.
- A total of 32 semester credits must be earned at TUI.
- All transferred courses must have the grade of C or better.

TUI uses the below notation to indicate transfer coursework that is relevant to the program of study, but does not have a direct equivalency at Trident University International.

- CIS399 (Upper-level Program Elective – CIS)
- ENELEC (English/Composition – GE Requirement)
- FELECT (Free Elective)
- GEBSCI (Social/Behavioral Science – GE Requirement)
- GEHUM (Arts/Humanities – GE Requirement)
- GENMATH (Mathematics – GE Requirement)
- GEPSCI (Physical/Biological Science – GE Requirement)

Bachelor of Science in Computer Sciences

The mission of the Bachelor of Science in Computer Science program is to prepare its students for productive computer science based careers in government, business, industry, and not-for-profit organizations by providing academic excellence, unparalleled access and compassionate student support. The BSCS program provides its graduates with a body of knowledge applicable to the present computing environment and a set of skills adaptable to the future computing needs.

Program Learning Outcomes:

The BSCS program enables students to achieve, by the time of graduation, abilities to:

1. Apply knowledge of computing and mathematics appropriate to the discipline.
2. Analyze a problem, and identify and define the computing requirements appropriate to its solution.
3. Design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
4. Communicate effectively with others to accomplish a common goal.
5. Explain professional, ethical, legal, security and social issues and responsibilities.
6. Communicate effectively with a range of audiences.
7. Analyze the local and global impact of computing on individuals, organizations and society.
8. Engage in continuing professional development.
9. Use current techniques, skills, and tools necessary for computing practice.
10. Apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.
11. Apply design and development principles in the construction of software systems of varying complexity.

The Bachelor of Science in Computer Science program requires 120 semester units to complete.

Admission Standards

High school graduate:

- High school diploma or its equivalent.
- High School transcripts will be required if transferring less than 36 credits into the BSCS program.
- International students must have a TOEFL exam score of 500/173/61.

Transfer from other institutions, up to 88 semester credits:

- Transfer from an accredited college or university or its international equivalent.
- Accepting transfer credits such as ACE, CLEP, DANTES, and Excelsior etc.
- GPA 2.0 or better (the student may be accepted on a conditional basis if the overall GPA is below 2.0).
- All transferred courses must have the grade of C or better.

Degree Requirements

Students must meet the University's general education requirements as specified in the General Education (GE) section on page 2 of this catalog. The BSCS program requires students to successfully complete the below GE courses (or their equivalent).

MAT 101 – College Mathematics	4 Credits	Description
MAT201 – Basic Statistics	4 Credits	Description
SCI201 – Applied Physics I	4 Credits	Description
SCI202 – Applied Physics II	4 Credits	Description
SCI204 – Applied Scientific Inquiry	4 Credits	Description
ENG101 –English Composition I	4 Credits	Description
ENG102 –English Composition II	4 Credits	Description
ECO201 -Microeconomics	4 Credits	Description

Computer Science Required Core Courses (60 Credits)

CSC111 – Foundations of Computing and Program Design	4 Credits	Description
CSC113 – Introduction to Object Oriented Programming	4 Credits	Description
CSC212 – Intermediate Object Oriented Programming	4 Credits	Description
CSC310 – Advanced Programming Topics	4 Credits	Description
CSC316 – Database Systems I	4 Credits	Description
CSC317 – Database Systems II	4 Credits	Description
CSC320 – Web Engineering and Programming I	4 Credits	Description
CSC325 – Operating Systems and Environments	4 Credits	Description
CSC405 – Web Engineering & Programming II	4 Credits	Description
CSC412 – Client Server Networks and Distributed Processing	4 Credits	Description
CSC414 – Advanced Networking: Wireless Hybrid Networks	4 Credits	Description

CSC422 – Web Services	4 Credits	Description
CSC423 – Web Services II	4 Credits	Description
CSC425 – BSCS Integrative Project (Capstone)	4 Credits	Description
ITM434 – Business Ethics and Social Issues in Computing	4 Credits	Description

Bachelor of Science in Computer Science Summary

General Education Courses	45 Credits
Free electives	15 Credits
Computer Science Core Courses	60 Credits
Total Credits	120 Credits

Bachelor of Science in Information Technology Management

The mission of the Bachelor of Science in Information Technology Management program is to prepare students for a career in a broad range of information-based fields including careers within government, business, and not-for-profit organizations.

Specifically, the program provides students with a basic understanding of both technical issues in IT management (databases, networks, security, etc.) and managerial applications (financial and marketing information systems, systems design, etc.), along with a solid foundation in the function of information systems in management and the social and ethical dimensions of IT practice. Emphasis is placed on the integration of the social and technical components of IT systems and the need to jointly manage both aspects of information management.

Graduates will be well equipped to support senior IT personnel working across different managerial areas, by virtue of their exposure to an extremely wide range of IT concerns and problems during their training and the emphasis during that training on “speaking the language” of different areas of management and technologies and being able to mediate and translate between these different points of view.

Graduates of the BSITM program should be able to function successfully in information technology management based career path; meet the needs of constant change in information technology management by engaging in pursuit of excellence and lifelong learning; research specific topics in the core areas of information technology management; make effective information technology

management decisions using appropriate analytical and critical thinking processes; contribute to information system projects, and communicate effectively with other professionals technical and non-technical areas; and pursue advanced degrees in information technology management or related disciplines.

Program Learning Outcomes:

The BSITM program enables students to achieve, by the time of graduation, abilities to:

1. Describe various computing hardware configurations, including the major components of systems, the kinds of choices among them to be made; identify reasons why an organization might prefer one set of hardware configurations over others.
2. Identify the major classes of computer software, describe how different kinds of software support different organizational functions; outline effective processes for software development and/or selection, including the relative advantages and disadvantages of open-source vs. proprietary programs.
3. Describe the implementation of information technology in socio-technical terms, including joint optimization of social and technical systems and the stages of implementation; explain how effective project management can support implementation and integrate new systems into the organization's overall mission and goals.
4. Describe how information is used in organizational decision making, and how organizational strategies interact with information management strategies; explain how information security conditions organizational strategies, and the costs and benefits of different approaches.
5. Describe how various social, economic, and environmental factors affect the information available to organizations, and the role of specialized and legacy systems in decision making; outline likely changes forthcoming in information technologies and their possible organizational effects.

The Bachelor of Science in Information Technology Management program requires 120 semester units to complete.

Admission Standards

High school graduate:

- High school diploma or its equivalent.
- High School transcripts will be required if transferring less than 36 credits into the BSBA program.
- International students must have a TOEFL exam score of 500/173/61.

Degree Requirements

General Education BSITM Degree Requirements:

Students must meet the University's general education requirements as specified in the General Education (GE) section on page2 of this catalog. The BSITM program requires students to successfully complete the below GE courses (or their equivalent).

MAT 101 – College Mathematics	4 Credits	Description
MAT201 – Basic Statistics	4 Credits	Description
SCI204 – Applied Scientific Inquiry	4 Credits	Description
ENG101 –English Composition I	4 Credits	Description
ENG102 –English Composition II	4 Credits	Description
ECO201 –Microeconomics	4 Credits	Description
ECO202 – Macroeconomics	4 Credits	Description

Elective ITM courses

ITM205 – Object Oriented Programming	4 Credits	Description

Required Business Administration Courses (8 Credits)

BUS205 – Business Law	4 Credits	Description
MGT301 – Principles of Management	4 Credits	Description

Required BSITM Core Courses (52 Credits):

ITM423 – Systems Acquisition, Systems Development, and Project Management	4 Credits	Description
ITM424 – Introduction to Software and Technical Support	4 Credits	Description
ITM425 – Introduction to Computing	4 Credits	Description

ITM431 – Introduction to IT Security	4 Credits	Description
ITM432 – Principles of Finance and Financial Information Systems	4 Credits	Description
ITM433 – Computer-Human Interaction, Groupware, and Usability	4 Credits	Description
ITM434 – Business Ethics and Social Issues in Computing	4 Credits	Description
ITM435 – Marketing and Marketing Information Systems	4 Credits	Description
ITM436 – Operations Management and Operations Information Systems	4 Credits	Description
ITM440 – Database Technology and Database Administration	4 Credits	Description
ITM441 – Network Technology and Network Administration	4 Credits	Description
ITM442 – Knowledge Management, Business Intelligence, and Enterprise Systems	4 Credits	Description
ITM491 – BSITM Integrative Project (Capstone)	4 Credits	Description

Bachelor of Information Technology Management Summary

General Education Courses	45 Credits
Free electives	15 Credits
Business Administration Courses	8 Credits
Information Technology Management Core Courses	52 Credits
Total Credits	120 Credits

Master of Science in Information Technology Management

The Masters in Information Technology Management prepares the graduate to manage IT systems development and implementation, plan and design IT architecture to support these networked systems, develop security and risk management plans for the IT systems, manage IT planning to insure that IT is in step with the strategic direction of the firm, and management of emerging technologies in the firm's IT infrastructure and systems.

Program Learning Outcomes:

Upon successful completion of their respective program option, graduates should be able to:

1. Function at the professional management level in his/her chosen field of information technology management.
2. Demonstrate effective written communication skills in an advanced information technology environment.
3. Perform critical analysis of complex information technology situations and offer and evaluate alternative solutions.
4. Apply information technology knowledge, concepts, and frameworks to dynamic business situations.
5. Marshal and manage relevant information technology resources particularly in uncertain and global business environments.
6. Integrate, apply, and synthesize knowledge across the functional areas of information technology.
7. Demonstrate awareness of and work effectively in a diverse organization within an information technology environment.
8. Recognize, analyze, and confront ethical and social responsibility issues in information technology management.

Admission Requirements

Students seeking admission to any Graduate Program at TUI must provide a baccalaureate degree transcript from an accredited college or university in a related field, with a minimum GPA of 2.5 or better.

International students must have a minimum TOEFL of 525/197/71

Transfer Policies

TUI may transfer up to 30% of the semester credits required to complete the specific Master's level program. The transferring course(s) must be from accredited graduate level institution(s); must meet the same general content standards as the TUI courses; and must have earned a Grade of "B" (3.0) or better.

Requirements for Graduation

To qualify for the M.S. degree in Information Technology students must successfully fulfill both of the following requirements:

- Complete each required graduate course with a grade of "B-" (2.67) or better.
- Maintain an overall GPA of "B" (3.0) or better for all graduate level coursework applying toward the degree.

There is no thesis or comprehensive examination for the Master of Information Technology Management degree program.

Degree Requirements

ITM524 – Foundations of Information Technology Management	4 Credits	Description
ITM525 – Application and Management of Emerging Networked Technologies	4 Credits	Description
ITM527 – IT Security and Disaster Recovery Management	4 Credits	Description
ITM540 – Database & Knowledge-base Management	4 Credits	Description
ITM580 – Strategic Planning for IT	4 Credits	Description
ITM590 – Integrated Project (Capstone Course)	4 Credits	Description

Concentrations Courses (12 Credits)

Business Intelligence

Program Learning Outcomes

1. Function at the IT Management level in areas dealing with business intelligence.
2. Demonstrate effective written communication in an advanced business intelligence environment.
3. Perform critical analysis of complex situations within business intelligence systems and offer and evaluate alternative solutions.
4. Apply IT management and technical knowledge, concepts, and frameworks to dynamic situations within business intelligence systems.
5. Marshal and manage relevant resources within business intelligence systems particularly in an uncertain global environment.
6. Integrate, apply, and synthesize knowledge across the functional areas of IT organizations.
7. Demonstrate awareness of and work effectively in a diverse organization which emphasizes business intelligence activities.
8. Recognize, analyze, and confront ethical and social responsibility issues in the business intelligence field.

BUS504 – Contemporary Business Research Methodology	4 Credits	Description
ITM535 – Business Intelligence, Data Mining, Data Warehousing, Data Analysis	4 Credits	Description
ITM538 – Knowledge Management & Information Services	4 Credits	Description

Information Security / Assurance and Digital Forensics

Program Learning Outcomes

1. Function at the IT Management level in areas dealing with information security.
2. Demonstrate effective written communication in an advanced information security environment.
3. Perform critical analysis of complex situations dealing with information security in complex systems and offer and evaluate alternative solutions.
4. Apply IT management and technical knowledge, concepts, and frameworks to dynamic situations which demand information security and assurance.
5. Marshal and manage relevant resources within the systems environment to address information security issues particularly in an uncertain global environment.
6. Integrate, apply, and synthesize knowledge across the functional areas of IT organizations to improve information security and assurance.
7. Demonstrate awareness of and work effectively in a diverse organization which emphasizes information security and assurance activities.
8. Recognize, analyze, and confront ethical and social responsibility issues impacting information security and assurance.

ITM517 – Information Security Overview for Managers and Policy Makers	4 Credits	Description
ITM537 – Principles of Information Security Auditing and Digital Forensics	4 Credits	Description
ITM550 - Network Planning and Administration	4 Credits	Description

IT Project Management

Program Learning Outcomes

1. Function at the professional entry level in his/her chosen field of project management.
2. Use the Internet and other resources to remain current in project management.
3. Research specific topics in the core areas of project management.
4. Make effective decisions within project management using appropriate analytical and critical thinking processes.
5. Demonstrate effective written communication skills in a project management environment.

6. Develop a foundation of project management knowledge useful for advance project management certifications.

ITM533 – IT Projects, Logistics, and Contract Management	4 Credits	Description
ACC504 – Issues in Managerial Accounting	4 Credits	Description
ITM530 – Managing IT Systems in Context of Multiple Stakeholders Expectations	4 Credits	Description

Choose any 3 of the electives if no concentration is desired:

ITM515 – Customer Relations Management Technologies	4 Credits	Description
ITM530 – Managing IT Systems Development in Context of Multiple Stakeholder Expectations	4 Credits	Description
ITM533 – IT Project, Logistics and Contract Management	4 Credits	Description
ITM538 – Knowledge Management & Information Services	4 Credits	Description
ITM550 – Network Planning and Administration	4 Credits	Description
ITM560 – IT Management for Specialized Technologies: E-Business, E-Learning, Human Resource, Customer Relations Management	4 Credits	Description
ITM570 – Managing IT Change in an Environment of Emerging IT Technologies	4 Credits	Description

Graduate Certificates

TUIU offers Undergraduate and Graduate Certificates as part of the Undergraduate or Graduate programs respectively.

Students may apply to a specific program where the certificate is usually a special track/concentration within the program. Students categorically -- can **only** enroll in degree programs, even though they may receive documentation of having passed certain benchmarks. A certificate is a benchmark reached after completion of 4 (or more courses) within a specific program such as MBA–Certificate in Human Resource Management. The benefit is that a student who completes a cluster of courses, reaching the benchmark, may receive the certificate and continue with his/her degree program.

The MSITM program offers three (3) graduate certificates. The certificate courses may be taken as part of the MSITM program or taken as an extension of the MSITM program. The students will take 40 units of credit for the MSITM degree and an accompanying certificate; this includes the six required courses for the MSITM and the four courses comprising the desired Certificate. The Certificates offered are **Business Intelligence, Information Security/Assurance and Digital Forensics, and IT Project Management.**

All students seeking a Graduate Certificate must be admitted to TUI as a regularly admitted graduate student.

Admission Standards

- Possess a baccalaureate degree from an accredited college or university in business or related field with a minimum GPA of 2.0. Submit transcripts of undergraduate and all prior graduate work.

Academic Requirements

To be awarded the graduate certificate, the student must earn a minimum "B-" (2.67) in the courses that constitute the certificate, with an overall program GPA of "B" (3.0) or better. Programs may require higher academic requirements for their specific certificates.

Graduate Certificate in Business Intelligence

The goal of the Graduate Certificate in Business Intelligence is to provide information technology managers, and others holding a bachelor's degree, the opportunity to master the advanced concepts and techniques which will enable them to apply the principles and best practices of business intelligence such as data mining, relational database design, data analytics, data warehousing, project management and other related applications. The emphasis is on the management practices for successful business intelligence application rather than the technical, detailed analytical tool side, and includes both the theoretical concepts and the application of these concepts to business intelligence practice. The certificate consists of a series of four graduate-level credit courses designed to provide graduates with cutting-edge methods based on research confirmed in practice in all types of organizations and industries. An elective course provides students with an opportunity for a hands-on applied project utilizing business intelligence tools.

Students must hold a bachelor's degree from an accredited institution and be enrolled in the MSITM program.

Required Courses (12 Credits)

BUS504 - Contemporary Business Research Methodology	4 Credits	Description

ITM540 - Database and Knowledge Base Management	4 Credits	Description
ITM535 - Business Intelligence, Data Mining, Data Warehousing, Data Analysis	4 Credits	Description

Elective Courses (4 Credits)

Please choose one (1) course from the following:

ITM533 - Project, Logistics and Contract Management	4 Credits	Description
ITM538 - Knowledge Management and Information Systems	4 Credits	Description
ITM515 - Customer Relations Management Technologies	4 Credits	Description

Graduate Certificate in Information Security/Assurance and Digital Forensics

The goal of the Graduate Certificate in Information Security is to provide professionals the opportunity to master the principles and best practices to better address the increasing global and local information security concerns. Because of the continuous advancements in information technologies, security risks have also increased. Public and private institutions wishing to maintain and improve their position in today's digital economy have a great need for skilled IT security professionals. This certification will prepare students for understanding, developing, managing and controlling security policies and standards aimed to protect the information assets of an organization and its users. The emphasis of this certification is on policy issues, auditing and forensics that should be implemented for prevention, detection and mitigation of security attacks. The certificate consists of a series of four graduate-level credit courses designed to provide graduates with the latest security principles and approaches confirmed in practice in all types of organizations and industries, including an elective course providing students with an opportunity to concentrate on a specific area of emphasis within which information security finds applications

Students must hold a bachelor's degree from an accredited institution and be enrolled in the MSITM program.

Total credit requirement for the Graduate Certificate is 16 credits.

Required Courses (12 Credits)

ITM517 – Information Security Overview for Managers and Policy Makers	4 Credits	Description

ITM527 - IT Security and Disaster Recovery Management	4 Credits	Description
ITM537 – Principles of Information Security Auditing and Computer Forensics	4 Credits	Description

Elective Courses (4 Credits)

Please choose one (1) course from the following:

ITM540 – Database and Knowledge Base Management	4 Credits	Description
ITM550 – Network planning & Administration	4 Credits	Description
ITM570 – Managing IT Change in an Environment of Emerging IT Technologies	4 Credits	Description

Graduate Certificate in IT Project Management

The goal of the Graduate Certificate in IT Project Management is to provide IT professionals the opportunity to master the principles and best practices to better develop IT projects that are planned, negotiated, managed and completed in organizations. Because of the continuous advancements in information technologies and other tools, project management skills may be more formalized and more effectively utilized in organizations. Public and private institutions wishing to maintain and improve their position in today's competitive global economy have a great need for skilled IT project management professionals who understand IT management and systems. This certification will prepare students for understanding, developing, managing and controlling, deploying projects from those relatively small in scope and size to those which are massive in scope and size. The emphasis of this certification is on both management skills and tools, and management awareness of information technologies and accounting/financing tools for cost control. The certificate consists of a series of four graduate-level credit courses designed to provide graduates with the project management principles and approaches confirmed in practice in all types of organizations and industries. Three courses are required with an elective course which provides students with an opportunity to concentrate on a specific area of emphasis within the project management domain.

Students must hold a bachelor's degree from an accredited institution and be enrolled in the MSITM program.

Total credit requirement for the Graduate Certificate is 16 credits.

Required Courses (12 Credits)

ITM533 – Project, Logistics, and Contract Management	4 Credits	Description
ACC504 – Issues in Managerial Accounting	4 Credits	Description
ITM530 – Managing IT Systems Development in Context of Multiple Stakeholder Expectations	4 Credits	Description

Elective Courses (4 Credits)

Please choose one (1) course from the following:

ITM570 – Managing IT Change in an Environment of Emerging IT Technologies	4 Credits	Description
NCM512 – Negotiation Strategies	4 Credits	Description
NCM501 – Foundations of Conflict Resolution	4 Credits	Description