PROFESSIONAL SPECIALIZATION(s)

About Section F...
This section addresses the third major component of the MSAT Program—the PROFESSIONAL SPECIALIZATIONS. Specifically, this section includes the following subsections:

▶ Introduction to the PROFESSIONAL SPECIALIZATION

▶ Five Professional Specializations/Tracks
  - Track 1: *Applied* Information Systems
  - Track 2: *Applied* Network Technology
  - Track 3: *Applied* IT Project Management
  - Track 4: *Applied* Information Technology
  - Track 5: *Applied* Human-Computer Interaction

▶ Special Introductory Courses (Tracks 2 & 5)
Introduction to the PROFESSIONAL SPECIALIZATION...

The Professional Specialization (within the MSAT Program) includes a career-related ‘track’ of core courses offered by DePaul’s College of Computing and Digital Media/CDM. As such, all CDM courses are subject to CDM tuition.

At the point of admission to the MSAT Program, each student identifies the track that he/she wishes to pursue in and through the program. Thereafter, through AT-580 (2cr) ProSeminar I: Introduction to Applied Technology, the student focuses his/her learning agenda with respect to the courses included per track.

FIVE PROFESSIONAL SPECIALIZATIONS/TRACKS...

Each of the following five pages is devoted to one of MSAT’s Professional Specialization Tracks:

- TRACK 1: Applied Information Systems
- TRACK 2: Applied Network Technology
- TRACK 3: Applied IT Project Management
- TRACK 4: Applied Information Technology
- TRACK 5: Applied Human-Computer Interaction

NOTE: MSAT Track Courses (foundational and advanced) may be substituted with other CDM courses or with appropriate transfer courses from other accredited institutions—provided the proposed substitution is comparable to the standing course, is applied within no more than 5 years of the course’s completion (earning a C or better) and preserves the overall integrity of the “track.” Students may submit proposals for course substitution by submitting the request and rationale to the CDM MSAT Co-Coordinator. If approved, the new or transfer course will be applied to replace the standing track requirement. Unless otherwise stated, courses may NOT be applied to more than one degree program and no more than one course (4cr hrs) of a track’s foundational & advanced courses can be satisfied by an approved transfer course.
## MSAT Track: Applied Information Systems

### Part I: ProSeminars in Applied Technology

See Section C (Program Overview)—page C-4.
See Section D (Proseminars).

### Part II: Liberal Learning

See Section C (Program Overview)—page C-4.
See Section E (Liberal Learning).

### Part III: Prof. Specialization (24 cr)

The **Applied Information Systems** specialization focuses on integrating business and technology with an emphasis on the development, management and planning of information systems. This focus provides students with a strong foundation in business and systems analysis, project management and database and enterprise infrastructure. Students completing this specialization possess a broad range of skills and understandings in support of organizations gaining strategic and tactical competitive advantage.

- **Foundation (12cr)**
  - (4cr) IS-421 System Analysis
  - (4cr) CSC-451 Database Design
  - (4cr) IS-422 System Design

- **Advanced (12cr)**
  - (4cr) ECT-424 Enterprise Infrastructure
  - (4cr) IS-430 IT Project Management
  - (4cr) one course from—
    - **Bus. Analyst:** IS-435 Org. Modeling; IS-485 Requirements Elicitation, Analysis & Specification
    - **IT Mgt:** IS-483 Info. Serv. & Ops; IS-505 Bus. Continuity/Disaster Recovery; IS-565 IT Outsourcing

ProSeminar II is ideally inserted here in preparation for culmination phase (Part IV).

### Part IV: Culmination

See Section C (Program Overview)—page C-4.
See Section G (Culmination).

### GRADUATION

[See Graduation Information & Steps in Index (Section J).]

- For information regarding courses offered by the College of Computing and Digital Media/CDM, see [http://www.cdm.depaul.edu/academics/Pages/CourseSchedule.aspx](http://www.cdm.depaul.edu/academics/Pages/CourseSchedule.aspx).
MSAT Track: **Applied Network Technology**

**Part I: ProSeminars in Applied Technology**

See Section C (Program Overview)—page C-4.

See Section D (Proseminars).

**Part II: Liberal Learning**

See Section C (Program Overview)—page C-4.

See Section E (Liberal Learning).

**Part III: Prof. Specialization (24 cr)**

The **Applied Network Technology** specialization focuses on innovative network designs and developing network applications and services for business enterprises and the network providers that serve them. This focus offers theoretical and applied study in the design, configuration and management of converged communication networks. Students completing this specialization possess a broad range of skills and understandings in support of the technical and operational aspects of networks, voice-data communications and network management.

☑️ Foundation (introduction + 12 cr)

* (4 cr) TDC-405 Voice and Data Network Fundamentals
* (4 cr) TDC-411 Intro. to Computer and Network Systems
* (4 cr) TDC-413 Intro. to LAN and WAN

- (4 cr) TDC-460 Foundations of Network Technologies
- (4 cr) TDC-463 Computer Networks and Data Systems
- (4 cr) TDC-464 Converged Multimedia Networks

☑️ Advanced (12 cr)

- (12 cr) three courses in “applied telecommunications” (in consultation with CDM MSAT Co-Coordinator)
- OR–

- (12 cr) three courses in “applied network & information security” (in consultation with CDM MSAT Co-Coordinator)

ProSeminar II is ideally inserted here in preparation for culmination phase (Part IV).

**Part IV: Culmination**

See Section C (Program Overview)—page C-4.

See Section G (Culmination).

**GRADUATION** [See Graduation Information & Steps in Index (Section J).]

☑️ For information regarding courses offered by the College of Computing and Digital Media/CDM, see http://www.cdm.depaul.edu/academics/Pages/CourseSchedule.aspx.
MSAT Track: **Applied IT Project Management**

### Part I: ProSeminars in Applied Technology

See Section C (Program Overview)—page C-4.
See Section D (Proseminars).

### Part II: Liberal Learning

See Section C (Program Overview)—page C-4.
See Section E (Liberal Learning).

### Part III: Prof. Specialization (24 cr)

The **Applied IT Project Management** specialization focuses on processes and strategies for leading and managing IT projects and teams including the application of project management skills. This focus is intended for those who have either a technology undergraduate degree or a few years of IT work experience and wish to advance their careers by filling the growing need for IT Project Managers. Students completing this specialization possess a broad range of skills and understandings in support of IT project management and program management roles.

- **Foundation (12cr)**
  - PM-430 (or) IS-430 IT Project Management
  - PM-556 (or) IS-556 Enterprise Project Management
  - MGT-500 Managing for Effect. & Ethical Org Behavior (or)
  - IS-500 Effect. Managing & Leading in IT

- **Advanced (12cr)**
  - PM-440 (or) IS-440 Collaborative Technologies for Leading People
  - PM-535 (or) IS-535 Information Technology Investment Financial Analysis
  - PM-570 (or) IS-570 Enterprise System Implementation

ProSeminar II is ideally inserted here in preparation for culmination phase (Part IV).

### Part IV: Culmination

See Section C (Program Overview)—page C-4.
See Section G (Culmination).

### GRADUATION

[See Graduation Information & Steps in Index (Section J).]

- For information regarding courses offered by the College of Computing and Digital Media/CDM, see [http://www.cdm.depaul.edu/academics/Pages/CourseSchedule.aspx](http://www.cdm.depaul.edu/academics/Pages/CourseSchedule.aspx).

---

F-5
MSAT Track: **Applied Information Technology**

### Part I: ProSeminars in Applied Technology

See Section C (Program Overview) — page C-4.
See Section D (Proseminars).

### Part II: Liberal Learning

See Section C (Program Overview) — page C-4.
See Section E (Liberal Learning).

### Part III: Prof. Specialization (24 cr)

The **Applied Information Technology** specialization focuses on the allocation of monetary and human resources and the execution of daily operations in the management of organizational IT functions. Such positions have responsibility for identifying and championing the strategic use of IT within their organizations as well as ensuring that the IT infrastructure is capable of meeting strategic business goals. Students completing this specialization possess a broad range of skills and understandings in support of managing various functional departments within the information technology areas.

- **Foundation (12cr)**
  - PM-430 (or) IS-430 IT Project Management
  - IS-483 Information Services and Operations
  - ECT-424 Enterprise Infrastructure

- **Advanced (12cr)**
  - PM-433 Information Security Management
  - IS-535 Information Technology Investment Financial Analysis
  - CSC-451 Database Design

ProSeminar II is ideally inserted here in preparation for culmination phase (Part IV).

### Part IV: Culmination

See Section C (Program Overview) — page C-4.
See Section G (Culmination).

---

**GRADUATION** [See Graduation Information & Steps in Index (Section J)].

For information regarding courses offered by the College of Computing and Digital Media/CDM, see [http://www.cdm.depaul.edu/academics/Pages/CourseSchedule.aspx](http://www.cdm.depaul.edu/academics/Pages/CourseSchedule.aspx).
MSAT Track: **Applied** Human-Computer Interaction

### Part I: ProSeminars in Applied Technology

- See Section C (Program Overview)—page C-4.
- See Section D (Proseminars).

### Part II: Liberal Learning

- See Section C (Program Overview)—page C-4.
- See Section E (Liberal Learning).

### Part III: Prof. Specialization (24 cr)

The **Applied** Human-Computer Interaction specialization focuses on the designing, implementing and evaluating computer interfaces to ensure their accessibility and ease of use. This interdisciplinary focus integrates concepts and methods from computer science, graphic design and the social sciences to provide a comprehensive understanding of the user-centered design process. Students completing this specialization possess a broad range of skills and understandings in support of areas such as user-centered design, usability testing, information architecture and dynamic website prototyping.

#### Foundation (introduction + 12 cr)

- These three intro. courses may be waivable. See p. F-8.
  - (4cr) HCI-402 Foundations of Digital Design
  - (4cr) HCI-406 Web Site Design for HCI
  - (4cr) IT-403 Statistics and Data Analysis
  - (4cr) IT-411 Scripting for Interactive Systems

- HCI-440 Usability Engineering
- HCI-445 Inquiry Methods and Use Analysis
- HCI-454 Interaction Design

#### Advanced (12 cr)

- (12cr) three courses from—
  - HCI-430 Prototyping and Implementation
  - HCI-450 Foundations of Human Computer Interactions
  - HCI-460 Usability Evaluation Methods
  - HCI-470 Digital Page Formatting I
  - HCI-511 Designing for Disabilities

ProSeminar II is ideally inserted here in preparation for culmination phase (Part IV).

### Part IV: Culmination

- See Section C (Program Overview)—page C-4.
- See Section G (Culmination).

### Graduation

[See Graduation Information & Steps in Index (Section J).]

- For information regarding courses offered by the College of Computing and Digital Media/CDM, see [http://www.cdm.depaul.edu/academics/Pages/CourseSchedule.aspx](http://www.cdm.depaul.edu/academics/Pages/CourseSchedule.aspx).
Special INTRODUCTORY COURSES (Tracks 2 & 5)

A list of introductory courses has been identified to support student success within Track 2: Applied Network Technology and Track 5: Applied Human-Computer Interaction.

Students with sufficient experience pertaining to the appropriate track’s focus may, in consultation with the CDM MSAT Co-Coordinator, propose to waive one or more of these courses (per track). Students also may secure a waiver from these courses by taking and passing a CDM Graduate Assessment Exam (GAE) per course.

For information regarding CDM Graduate Assessment Exams, see http://www.cdm.depaul.edu/academics/pages/graduateassessmensexams.aspx