

## Master of Information and Telecommunication Systems (MITS) Program Checksheet

The Master of Information and Telecommunication Systems Program is a 36-credit hour degree program (typically 9 courses) offered by the J. Warren McClure School of Emerging Communication Technologies. The degree is offered residentially and online.

It is possible to complete the residential program at Ohio University in Athens, Ohio in 16 months (three semesters), especially if the student elects to complete a comprehensive examination as a culminating experience, rather than a thesis or professional project. Those students electing to write a thesis or do a professional project usually prefer to take longer to complete the program. For the online program, it is possible to complete the program in 20 months (four semesters and one summer session), however, this requires students to take two courses per semester and a summer course.

The MITS program is comprised of core, specialization, and cognate courses, as well as a culminating experience.

The three core courses (which are required of all MITS students) introduce students to the technological and management aspects of communication networks and information systems, telecommunication carriers, and enterprise voice and data networks; these three courses are taken in the MITS program. Four ITS specialization courses (selected from a list of ITS electives) allow students to develop expertise in technology, policy, or a blend of technology and policy. Students are also required to complete four credit hours of cognate courses, which are intended to enrich and focus further the student's interests and expertise. Students complete the cognate requirement through relevant coursework taken outside of the ITS school, or by completing an additional ITS elective or approved internship. Possible cognate areas outside of ITS include economics, business, political science, electrical engineering, computer science, industrial and systems engineering, and mathematics.

Students elect one of three culminating experiences: 1) a thesis, 2) a professional project, or 3) a comprehensive examination. Students electing the thesis option are expected to identify a significant technical, management, or policy question conduct a thorough literature review of the topic, formulate an appropriate research approach, collect and analyze data, draw defensible conclusions, and produce a well-written, coherent thesis. Students electing the professional project option are expected to identify a specific project relevant to this field of study, research relevant literature, identify specific issues, examine available alternatives, recommend the optimal alternative, and produce a well-written, coherent report detailing all aspects of the project. Students are encouraged to find a project at their place of employment (as either an intern or a permanent employee). Those selecting the comprehensive exam complete the advanced reading course and pass a comprehensive examination that is based on a list of readings where students are expected to apply concepts from their coursework in their responses. (Students can take the comprehensive examination in either November or April.)

Students electing the thesis or project options must form a 3-person committee chaired by the student's advisor and submit to that committee a written thesis or project proposal. This proposal must be approved by the committee and then submitted to the Graduate Director. The format of a thesis must be in accordance with the Thesis and Dissertation Services Guidelines, specifically the Scripps College of Communication for APA/MLA template; the thesis is submitted to the College through Thesis and Dissertation Services. The format of a project report must also follow these guidelines; the project is submitted to the McClure School.

All students must select an advisor, and meet with their advisor during the advising season of each semester. The advisor approves the student's "MITS Student Advising Planning Sheet" each semester, which must

also be endorsed by the Graduate Director. The “MITS Student Advising Planning Sheet” includes the desired cognate courses and the student’s choice of culminating experience. The “MITS Student Advising Planning Sheet” should be approved before the beginning of the second semester of study; students should not assume that courses taken before a “MITS Student Advising Planning Sheet” is approved will be recognized as cognate credit.

## Steps toward the MITS Degree

### 1. Filed “MITS Student Advising Planning Sheet” (required of all MITS students):

\_\_\_\_\_ “MITS Student Advising Planning Sheet” approved by Advisor and Endorsed by Director of Graduate Studies

### 2. Core Courses (all 3 courses required; a total of 12 hours required):

\_\_\_\_\_ ITS 6000: Research Methods in Information and Telecommunication Systems\* (4)

\_\_\_\_\_ ITS 6250: Information Networks\* (4)

\_\_\_\_\_ ITS 6440: Strategic Issues in Info and Telecom Systems Technology & Policy\* (4)

### 3. Elective Courses (Four courses required: a total of 16 hours required)

There are both technical and policy oriented electives. Your three-course selection can be all technical, all policy, or a mix of technical and policy electives.

#### Technical Elective Courses:

\_\_\_\_\_ ITS 5290: Communication Network Analysis and Design\* (4)

\_\_\_\_\_ ITS 5370: Wireless Telecommunications\* (4)

\_\_\_\_\_ ITS 5390: Communication Technology Lab Practicum. (4)

\_\_\_\_\_ ITS 5410: Voice over IP (4)

\_\_\_\_\_ ITS 5510: Telecommunication Network Security (4)

\_\_\_\_\_ ITS 5530: Encrypted Communication (4)

\_\_\_\_\_ ITS 5750: Internet Engineering. (4)

\_\_\_\_\_ ITS 6790: Theory of Communication Networks\* (4)

\_\_\_\_\_ ITS 6900: Topical Seminar\* (4)

\_\_\_\_\_ ITS 6930: Independent Study\* (Variable hours)

\* Also offered to online students

**Market/Policy Elective Courses (\* indicates courses available to online students):**

- \_\_\_\_\_ ITS 5019: Information and Telecommunication Policy I\* (4)
- \_\_\_\_\_ ITS 5020: Strategic Decision Making in Information and Telecommunications Industries (4)
- \_\_\_\_\_ ITS 5310: Privacy in the Internet Age\* (4)
- \_\_\_\_\_ ITS 5330: IT Compliance and Planning (4)
- \_\_\_\_\_ ITS 6030: Advanced Policy and Regulation for ICT Networks (4)
- \_\_\_\_\_ ITS 6090: Telecommunications and Economic Development (4)
- \_\_\_\_\_ ITS 6910: Internship (2) MAY NOT BE USED AS AN ELECTIVE. MAY BE USED AS COGNATE.
- \_\_\_\_\_ ITS 6900: Topical Seminar\* (4)
- \_\_\_\_\_ ITS 6930: Independent Study\* (Variable hours)

**4. Cognate Courses (a total of 4 credit hours required):**

These courses are selected by the student in consultation with the advisor, and must be in the approved and endorsed Plan of Study. The cognate courses can be taken outside of ITS or can be an additional ITS elective course. One ITS elective course satisfies the requirement, while coursework outside ITS may require more than one course to earn at 4 credit hours. ITS 6910 (Internship) may be used as a cognate course.

- \_\_\_\_\_ Cognate Course \_\_\_\_\_
- \_\_\_\_\_ Cognate Course \_\_\_\_\_

**5. Culminating Experience (4 hours required, either thesis hours, project hours, or readings hours, depending on culminating experience selected):**

**Thesis Option:**

- \_\_\_\_\_ ITS 6950: Thesis\* (4)

**Professional Project Option:**

- \_\_\_\_\_ ITS 6945: Professional Project\* (4)

**Comprehensive Examination Option:**

- \_\_\_\_\_ ITS 6935: Advanced Readings in Communication Technology and Policy\* (4)

## 6. Culminating Experience Approvals

\_\_\_\_\_ Thesis Proposal Defense \_\_\_\_\_ Thesis Defense \_\_\_\_\_ Thesis Submission\*\*

\_\_\_\_\_ Project Proposal Defense \_\_\_\_\_ Project Defense \_\_\_\_\_ Project Submission\*\*\*

\_\_\_\_\_ Passing Grade on Comprehensive Exam

\*\* Submitted to the OU Library in accordance with Electronic Thesis/Dissertation Guidelines, specifically the Scripps College of Communication for APA/MLA template

\*\*\* Submitted to ITS

### Additional Study Opportunities

The following are options for individual study with a faculty member on a specific topic of interest. **These hours of credit typically do not count toward the 36 hours required for the MITS degree.** That means they do not count as cognate or elective credit without permission of your advisor, and approved in your plan of study.

\_\_\_\_\_ ITS 6930 Independent Study\* (Variable hours)

\_\_\_\_\_ ITS 6970 Research (Variable hours)

\* Also offered to online students