Biological Sciences, Chemistry, Civil & Environmental Engineering, Computer Science, Electrical Engineering, Forestry, Geological Engineering, Mathematics, and Physics

MichiganTech

Degree Services
Office of Student Records & Registration

Interdisciplinary Minor in Remote Sensing

IMRS

Name (please print): _____
(Last) (First) (Middle)

Student Number: _____

Primary Major:_____ Expected Major Completion Term: _____

Required Courses

_____ UN4000 Remote Sensing Seminar (1)

Choose one of the following two courses:

_____ FW4540 Remote Sensing of the Environment (3)

_____ GE4250 Remote Sensing Fundamentals (3)

Elective Courses *(Data Acquisition & Processing)*

Select 3-6 credits from the following:

_____ GE4250 Remote Sensing Fundamentals (3)
(Do not select if selected under Required Courses above.)

_____ EE2150 Intro to Signal Processing** (3)

_____ EE3140 Electromagnetics (3)

_____ EE4252 Digital Signal Processing (4)

_____ EE5500 Statistical Signal Processing (3)

_____ EE5520 Fourier Optics (3)

_____ FW5560 Digital Image Processing: A Remote Sensing Perspective (4)

_____ PH2230 Electronics for Scientists** (4)

_____ PH3210 Geometrical & Physical Optics (4)

_____ PH5630 Imaging Systems (2)

_____ PH5950 Graduate Electronics for Sci. (3)

Elective Courses *(Data Management)*

Select 3-6 credits from the following:

_____ MA4515 Intro to Partial Diff. Equ. (3)

_____ MA4710 Regression Analysis (3)

_____ MA3730 Statistical Methods II (3)

_____ MA4610 Numerical Linear Algebra (3)

_____ MA5741 Multivariate Statistical Meth. (3)

_____ MA5980 Special Topics in Mathematics (3)

_____ CS2090 Special Topics in CS** (3)

_____ CS4611 Intro to Computer Graphics (3)

_____ CS3621 Intro to Computing w/Geometry (3)

_____ MA5701 Statistical Methods (3)

_____ FW3540 An Introduction to Geographical Information Systems for Natural Resource Management (3)

_____ GE4160 Intro. To Subsurface GIS (3)

_____ CE5661 GIS Applications (3)

_____ FW5550 Geographic Info. Systems (4)

Elective Courses *(Data Analysis and Applications)*

Select 3-6 credits from the following:

_____ FW4540 Remote Sensing of the Environment (3)

(Do not select if selected under Required Courses above.)

_____ UN4000 Remote Sensing Seminar (1)

(1 credit of UN4000 may be used in addition to Required Course above.)

_____ BL5520 Satellite Limnology (3)

_____ CE3610 Hydrology (3)

_____ CE4501 Environ. Eng. Chem. Processes (4)

_____ CE4504 Air Quality Engineering & Science (3)

_____ CE5505 Atmospheric Chemistry (3)

_____ CE/CH5509 Environ. Organic Chemistry (3)

_____ GE2500 Intro. to Oceanography (3)

_____ GE2640/PH2640 Atmospheric Observations and Meteorology** (3)

_____ GE4150 Natural Hazards (3)

_____ GE4170 Volcanic Clouds (4)

_____ GE5150 Advanced Natural Hazards (3)

_____ GE5160 Remote Sensing of the Earth (3)

_____ PH5910 Atmospheric Physics (2)

Elective Courses *(Independent Study/Senior Research Classes)*

Select 0-3 credits from the following:

_____ BL4000 Special Problems in Biology (3)

_____ CE4510 Baccalaureate Thesis (3)

_____ CH4990 Undergrad. Res. in Chemistry (3)

_____ CS4090 Special Topics in CS (3)

_____ EE4800 Special Topics in EE (3)

_____ FW4500 Independent Study (3)

_____ GE4960 Independent Geol. Eng. Res. Proj. (3)

_____ MA4990 Topics in Mathematics (3)

_____ PH4080 Senior Research I (3)

Student Date

Department Advisor Date

Minor in Remote Sensing (continued)

Information and Guidelines

- Minors will require a minimum of 16 semester credit hours. Minors must include at least 6 credit hours of 3000 level or higher courses which are not required for a student's Major degree except as free electives.
- Undergraduate requirements and special provisions for each Minor are listed and defined by each academic unit offering the Minor. Minors offered in cross-disciplinary areas must originate in a designated department, school, or multidisciplinary program as recognized by the University.
- Students may not take a Minor with the same title as their Major.
- A minimum grade point average of 2.0 is required for courses in the Minor.
- It is recommended that students consider Minors as early as possible in their program of study. Students desiring a Minor should indicate their intent by filing a "Change/Addition of Major/Minor" form with the Office of Student Records and Registration no later than the first semester of their junior year.
- Students desiring a Minor must also file the applicable 'Minor Audit Form' with the academic advisor of the department offering the minor two semesters prior to completion of their associated undergraduate degree. The academic advisor will approve and forward the form to Degree Services. Once this Minor Audit Form is on file with Degree Services, any change of intent to pursue the minor must be reported directly to the Degree Services Office, jddostal@mtu.edu or 487-2395. Failure to do so could delay the awarding of the undergraduate degree.
- Any changes to the requirements, e.g. course substitutions, must be indicated and submitted to the Degree Services Office on a "Petition to Alter Degree Requirements" form by the academic advisor in the department offering the minor.

** No more than 6 hours at the 2000 level can be counted toward the minor.

Credits Required = 16

Total Credits _____