



Requirements		Notes	Course	Credits	Term
GDS Core	Geospatial Data Sciences Core courses	EAS 541.001 Remote Sensing EAS 531.001 Principles of GIS			
SEAS Core	EAS 509 (Natural Systems Core) EAS 510 (Social Systems Core) or a course from the Social Systems distribution list*				
	IAMS Requirement * Two courses; 3CR minimum Please see other side of form for approved courses.				
Electives	Electives	Must be a graduate level course at 400-level and above. At least 6 GDS credits taken from the following course: EAS 501.034 EAS 501.015/018 "Intro & Adv Geoviz" EAS 501.077 "Multivariate Stats" EAS 534 EAS 540 EAS 543 EAS 545 EAS 549 EAS 639.006/016 EAS 687 Full list of non-SEAS elective courses on 2 nd page			
Analytics	Statistics	EAS 538 Nat Resource Statistics or equivalent			
Capstone or Non-capstone	Capstone	Option 1: Option 1: At most 6 credit hours of EAS 701 (Master's Project) or EAS 702 (Master's Practicum) or At most 12 credits of EAS 700 (Master's Thesis).			
	Non-capstone	Option 2: Additional approved courses to total 42 credits.			
TOTALS	TOTAL "EAS" CREDIT HOURS	Minimum 25 of 42 credit hours			
	TOTAL CREDIT HOURS	Minimum 42 credit hours			

* IAMS and Social Systems Distribution courses can double-count with Core requirements but we do not double-count the actual credits.

**Any waiver or substitution of degree requirement must be approved by both the faculty advisor and GDS Program Coordinator and submitted to OAP.

Course List

Geospatial Data Sciences Core Courses

EAS 541.001 Remote Sensing W (4)
EAS 531.001 Principles of GIS F & W (4)

Elective Courses:

EAS 501.077 "Multivariate Statistics for Environmental Science" EAS 639.013 "Intro to R", W
EAS 687 "Modeling for Landscape Planning" EAS 501.015/018 "Geovisualization of Environ & Society"
EAS 639.006 "Introduction to Python for GDS", W CLIMATE 585 "Intro to Remote Sensing & Inverse Theory"
EAS 639.016 "Interm Python for GDS", W SI 506 "Programming I"
EAS 501.034 "Field Remote Sensing & Analysis, SP SI 507 "Intermediate Programming"
EAS 620 "AR/VR for Sustainability", W 2CR SI 538 "Citizen Interaction Design"
EAS 534 GIS and Landscape Modeling SI 618 "Data Manipulation and Analysis"
EAS 540 GIS and Natural Resource Applications SI 649 "Information Visualization"
EAS 543 Environmental Spatial Data Analysis SI 671 "Data Mining: Methods and Applications"
EAS 545 Applied Ecosystem Modeling SI 696 "Big Data Analytics"
EAS 549 Analysis and Modeling of Environmental Data CLIMATE 585 "Intro to Remote Sensing & Inverse Theory"
CMPLXSYS 511 "Theory of Complex Systems"
CMPLXSYS 530 "Computer Modeling of Complex Systems"
CMPLXSYS 575 "Sensors, Data, and Intelligent Systems"
EECS 430 "Wireless Link Design"
EECS 532 "Microwave Remote Sensing I: Radiometry"

To count toward GDS Field of Study-specific elective requirement, EAS 639 seminar must be approved by the GDS Specialization Coordinator.

[Integrated Analytic Methods and Skills Requirement](#)

Students are required, at some point during their time enrolled in the program, to take 2 courses composing at least 3 credits from a faculty-approved list of courses that focus on integrative analytic methods and skills. IAMS courses can double-count with Core requirements but we do not double-count the actual credits.