

NRM Curriculum of Study
EARTH AND CLIMATE SCIENCE

Graduate Program: Natural Resources Management
Specialty Area (Option): Physical/Earth Resources Science
Participating Academic Unit: Soil Science
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Requirements

- **Background:** A four-year degree in agricultural, earth, physical or biological science. A baccalaureate degree in meteorology, atmospheric science or similar field is desirable but not necessary.
- **Coursework:** 30 semester units (minimum). Complete *Master's Degree Plan of Study and Supervisory Committee* form no later than the first week of second semester.
- **Oral Exam:** Student must be enrolled during the semester of the oral examination (usually the last semester.) Video conferencing is allowed for committee members who cannot be physically present for the oral exam.
- **Additional:** Refer to the section titled *Degree Requirements Checklist* in these Guidelines (pages 5-6).

Required Units		Approved Courses/Disciplines*	Units	Approved Courses/Disciplines*	Units
Specialty Area	16 or more	ABEN 644 Transport Processes	3	GEOL 614 Hydrogeology	3
		ABEN 652 Bioenvironmental Systems Design	3	ME 654 Heat and Mass Transfer	3
		ABEN 682 Instrumentation and Measurements	3	ME 753 Gas Dynamics	3
		ABEN 765 Small Watershed Hydrology and Modeling	3	ME 754 Boundary Layer Theory	3
		CE 621 Open-Channel Flow	3	NRM 631 NEPA and Environmental Impact Assessment	2
		CE 673 Air Pollution	3	NRM 632 Environmental Impact Statement	2
		CE 677 Applied Hydrology	3	PHYS 611 Optics for Scientists and Engineers	3
		ENGR 762 Heat and Mass Transfer	3	PHYS 662 Heat and Thermodynamics	3
		GEOG 655 Intro to Geographic Information Systems	3	SOIL 610 Soils and Land Use	3
		GEOG 656 Advanced Geographic Information Systems	3	SOIL 647 Microclimatology	3
Supporting Area: Biotic Resources Science	3	BOT 660 Plant Ecology	3	BOT 764 Ecological Processes	3
		BOT 762 Environment and Adaptation	3	NRM 701 Terrestrial Resources Management	3
			3		
Supporting Area: Social Sciences	3	COMM 642 Information Technology and Mass Media	3	EMGT 614 Spatial Analysis in Emergency Management	3
		ECON 681 Natural Resource Economics	3	EMGT 651 Floods, Blizzards and Tornadoes	3
		EMGT 611 Community Disaster Preparation	3	POLS 642 Global Policy Issues	3
Resource Analysis	3	CSCI 679 Introduction to Data Mining	3	STAT 725 Applied Statistics	3
		STAT 661 Applied Regression Models	3	STAT 726 Applied Regression and Analysis of Variance	3
		STAT 672 Time Series	3		
Research <i>Select paper or thesis</i>	2-4	NRM 797 Master's Paper			
	6-10	NRM 798 Master's Thesis			
Seminar	2	NRM 690 Graduate Seminar (required course)			

*Approved courses from the various disciplines are listed on pages 27-28.+