Minnesota North College

PROGRAM PLANNER
ACADEMIC YEAR 2024-25

Natural Resources-Geospatial
Associate of Applied Science | 64 credits

Campus: Itasca

First Year

FALL SEMESTER 2024 – 18 credits	Prerequisites	Credits	Hr Lc/Lb
BIOL 1131 – Dendrology		**3**	**(2/2)**
GEOG 1204 – Principles of GIS		**3**	
FORT 1201 – Intro to Natural Resources		**1**	**(0.5/1)**
FORT 1205 – Forestry Math		**2**	
FORT 1206 – Forest Protection		**2**	**(1/2)**
FORT 1212 – Forest Inventory		**4**	**(3/2)**
FORT 1301 – Wildland Firefighting		**3**	**(2/2)**

SPRING SEMESTER 2025 – 14 credits	Prerequisites	Credits	Hr Lc/Lb
COMM 1210 – Intro to Communication (MnTC Goal 1) **OR** **COMM 1215 – Public Speaking (MnTC Goal 1) – *(preferred)*** **OR** **COMM 1220 – Interpersonal Communication (MnTC Goal 1)**		**3**	
ENGL 1231 – Composition 1 (MnTC Goal 1)	**(CLR, CLW)**	**4**	
FORT/NRT 1214 – Natural Resource Careers	**(Successful completion of 9 cr within NR core program)**	**1**	
FORT 1610 – Intro to Surveying	**(FORT1205 or MATH0300)**	**3**	**(2/2)**
GEOG 2107 – Remote Sensing and Image Interpretation	**(GEOG1204)**	**3**	

Second Year

FALL SEMESTER 2025 – 15 credits (minimum)	Prerequisites	Credits	Hr Lc/Lb
BIOL 2131 – Forest Ecology	**(BIOL1131 or BIOL1561)**	**4**	**(2/4)**
ENGL 1240 – Technical Report Writing (MnTC Goal 1)	**(ENGL1231)**	**3**	
FORT 2105 – Wood Products		**2**	**(1.5/0.5)**
GEOG 1201 – Map Use and Analysis		3	(1/2)
NSCI 1220 – Environmental Science (MnTC Goals 3 & 10)		**3**	

SPRING SEMESTER 2026 – 17 credits	Prerequisites	Credits	Hr Lc/Lb
ECON 1200 – Intro to Economics (MnTC Goals 5 & 8)		3	
FORT 2016 – Principles of Silviculture	**(BIOL1131, FORT1212)**	**3**	**(2/2)**
FORT 2109 – Forest Management and Planning	(FORT1206/1212, GEOG1204; FORT2016/2112, concurrent enrollment okay)	**4**	**(2/4)**
GEOG 2104 – Modeling Techniques in GIS	(GEOG1204)	3	
GEOG 2201 – GIS Internship	(2.0 GPA minimum in 20 credits NR core courses)	1	
GEOG 2206 – Cartography		3	

Note: **Bolded** courses are "core" to all emphasis areas of the Natural Resources AAS degree program; un-bolded courses collectively differentiate this emphasis from the others.

Program Description

The Natural Resources AAS degree program provides students with the knowledge and skills to be proficient in the technical aspects of management and protection of forest resources. Graduates will successfully perform as natural resource technicians using a science-based approach, with an understanding of social, economic, and environmental issues within the natural resources field.

Minnesota North College's Natural Resources program at Itasca leads to the Associate of Applied Science degree and is accredited by the Society of American Foresters (SAF). The Council for Higher Education Accreditation recognizes SAF as the specialized accrediting body for forestry education in the United States.

The Geospatial emphasis ensures students are prepared with a background in both forest management and the ability to effectively utilize technology common to natural resource field technicians. Agencies such as the United States Forest Service and Minnesota Department of Natural Resources seek graduates capable of integrating technological applications within routine, field-based duties and the Geospatial emphasis of the Natural Resources program ensures that graduates have these basic skills. Employment outlook for graduates with geospatial skills is excellent and is expected to grow.

Occupational Titles

Natural Resource Technician

Program Learning Outcomes

Graduates of this program will:

1. Gain an understanding of the biological and ecological principles relevant for making decision in Natural Resource management.
2. Develop an understanding of the interactions of society's needs, personal ethics and environmental constraints as input to resource management decisions.
3. Develop skills in the application of technology and field-based skills for Natural Resource assessment.
4. Demonstrate skills and scientific principles acquired through the Natural Resource program in a work setting in Natural Resource Management.

Transfer and Articulation Agreements

In addition to directly entering the workforce, Natural Resources AAS graduates can transfer with their degree to the University of Minnesota Crookston, University of Minnesota St. Paul, or the University of Wisconsin – Stevens Point. For more information regarding transfer, visit the Student Services office or call 218-322-2320 to schedule an appointment.

Program Faculty Contact

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