INTERDISCIPLINARY SCIENCE AND TECHNOLOGY (P.S.M.)

Professional Science Master. Major in Interdisciplinary Science and Technology.

The Professional Science Master (P.S.M.) degree is a national program offered by over 300 institutions who participate in coordination with the National Professional Science Masters Association (NPSMA). Contact the College of Graduate Studies for specific courses and requirements.

There are 3 requirements for the P.S.M. degree in Interdisciplinary Science and Technology:

- 12 credits of professional skills courses.
- 15 credits in scientific coursework in the student's emphasis area.
- 3 credits of electives or practicum/capstone experience.

Code	Title	Hours
Professional Skills Courses		**12**
Professional Skills courses are science based courses in communication, leadership, data science, and management. See the College of Graduate Studies for approved courses.		
Emphasis Areas		**15**
Select one of the following emphasis areas:		
Sustainable Soil and Land Systems (p. 1)		
Climate Change (p. 1)		
Water Resources (p. 1)		
Ecohydrological Science and Management (p. 1)		
Precision Nutrition for Animal and Human Health (p. 1)		
Sustainable Food and Fiber (p. 2)		
Geographic Information Skills, Mapping, and Monitoring (p. 2)		
Elective or Practicum /Capstone course		**3**
The elective course should complement the student's emphasis area, but does not have to be from within that emphasis area.		
Total Hours		**30**

A. Sustainable Soil and Land Systems Emphasis

Code	Title	Hours
Select 15 credits from the following electives:		
ENVS 428	Pollution Prevention	
ENVS 485	Energy Efficiency and Conservation	
ENVS 536	Principles of Sustainability	
FISH 540	Wetland Restoration	
FS 509	Principles of Environmental Toxicology	
GEOG 455	Societal Resilience and Adaptation to Climate Change	
GEOG 513	Global Climate Change	
REM 440	Restoration Ecology	
WR 506	Interdisciplinary Methods in Water Resources	

B. Climate Change Emphasis

Code	Title	Hours
Select 15 credits from the following electives:		
BE 553	Northwest Climate and Water Resources Change	
BIOP 520	Introduction to Bioregional Planning	
FOR 462	Watershed Science and Management	
GEOG 401	Climatology	
GEOG 410	Biogeography	
GEOG 420	Land, Resources, and Environment	
GEOG 455	Societal Resilience and Adaptation to Climate Change	
GEOG 513	Global Climate Change	

C. Water Resources Emphasis

Code	Title	Hours
Select 15 credits from the following electives:		
ENVS 450	Environmental Hydrology	
FISH 540	Wetland Restoration	
FOR 462	Watershed Science and Management	
GEOG 524	Hydrologic Applications of GIS and Remote Sensing	
HYDR 512	Environmental Hydrogeology	
WR 506	Interdisciplinary Methods in Water Resources	

D. Ecohydrological Science and Management Emphasis

Code	Title	Hours
Select 15 credits from the following electives:		
ENVS 450	Environmental Hydrology	
FISH 415	Limnology	
FISH 430	Riparian and River Ecology	
FISH 515	Large River Fisheries	
FISH 540	Wetland Restoration	
FOR 462	Watershed Science and Management	
GEOG 524	Hydrologic Applications of GIS and Remote Sensing	
HYDR 512	Environmental Hydrogeology	
REM 440	Restoration Ecology	

E. Precision Nutrition for Animal and Human Health Emphasis

Code	Title	Hours
Select 15 credits from the following electives:		
AGEC 451	Applied Environmental and Natural Resource Economics	
BE 585	Fundamentals of Bioenergy and Bioproducts	
BE 592	Biofuels	
FSP 438/538	Lignocellulosic Biomass Chemistry	
FSP 536	Biocomposites	
PLSC 407	Field Crop Production	
PLSC 546	Plant Breeding	

F. Sustainable Food and Fiber Emphasis

Code	Title	Hours
Select 15 credits from the following electives:		
AGED 406	Exploring International Agriculture	
FS 564	Food Toxicology	
PLSC 407	Field Crop Production	
PLSC 546	Plant Breeding	
PLSC 551	Vegetable Crops	
SOIL 417	Market Garden Practicum	
SOIL 438	Pesticides in the Environment	
SOIL 446	Soil Fertility	
SOIL 527	Sustainable Food Systems	

G. Geographic Information, Skills, Mapping, and Monitoring Emphasis

Code	Title	Hours
Select 15 credits from the following electives:		
ECE 516	Image Sensors and Systems	
FIRE 554	Air Quality, Pollution, and Smoke	
GEOG 524	Hydrologic Applications of GIS and Remote Sensing	
REM 507	Landscape and Habitat Dynamics	
STAT 419	Introduction to SAS/R Programming	
STAT 555	Statistical Ecology	

Courses to total 30 credits for this degree.