School of Natural Resources

Robert Burns, Division Director of Forestry and Natural Resources
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Gerard D’Souza, Division Director of Resource Management
e-mail: gdsouza@mail.wvu.edu

Degrees Offered

- Master of Science in Forestry with a major in Forestry
- Master of Science with a major in Agricultural and Resource Economics
- Master of Science with a major in Recreation, Parks, and Tourism Resources
- Master of Science with a major in Wildlife and Fisheries Resources
- Doctor of Philosophy with a major in Forest Resources Science
- Doctor of Philosophy with a major in Human and Community Development
- Doctor of Philosophy with a major in Natural Resource Economics
- Doctor of Philosophy with a major in Resource Management

The School of Natural Resources offers master of science degree programs in four areas: agricultural and resource economics; forestry; recreation, parks and tourism resources; and wildlife and fisheries resources. Students wishing to pursue a master of science emphasizing forest resources management or wood science and technology should apply for admission to the master of science in forestry.

A student seeking admission to work toward the degree of doctor of philosophy in forest resources science in the School of Natural Resources may choose from one of the following Areas of Emphasis as their major field of study: forest resources management; recreation, parks, and tourism resources; wood science and technology; or wildlife and fisheries resources. Within these major fields of study, specialization is limited only by the range of competencies in the graduate faculty.

A limited number of graduate research assistantships are available to highly qualified students on a competitive basis.

FACULTY

DIRECTOR

- Robert C. Burns - Ph.D. (Pennsylvania State University)
  Director, Division of Forestry and Natural Resources
- Gerard E. D’Souza - Ph.D. (Mississippi State University)
  Director, Division of Resource Economics and Management

PROFESSORS

- James T. Anderson - Ph.D. (Texas Tech University)
  Wildlife ecology and management
- Robert C. Burns - Ph.D. (The Pennsylvania University)
  Understanding recreational behavior, motivations, and satisfaction levels
- Alan R. Collins - Ph.D. (Oregon State University)
  Resource economics
- Benjamin E. Dawson-Andoh - Ph.D. (University of British Columbia)
  Wood chemistry and preservation
- Gerard E. D’Souza - Ph.D. (Mississippi State University)
  Production economics, Finance
- John W. Edwards - Ph.D. (Clemson University)
  Endangered Species Ecology and Management, Forest Wildlife/Habitat Relationships
- Jerald J. Fletcher - Ph.D. (University of California, Davis)
  Energy, environmental and resource economics
- Tesfa Gebremedhin - Ph.D. (Oklahoma State University)
  Farm management, Agribusiness
- Kyle J. Hartman - Ph.D. (University of Maryland)
  Fisheries and Aquatic Ecology, Fish Management, Trophic Ecology
- David W. McGill - Ph.D. (Pennsylvania State University)
Extension Specialist, Forest Resources, Non-industrial Private Forestry
• Joseph F. McNeel - Ph.D. (Virginia Tech)
  Forest harvest and operations
• J. Todd Petty - Ph.D. (University of Georgia)
  Stream and Watershed Ecology
• Tim T. Phipps - Ph.D. (University of California, Davis)
  Resource economics, Agricultural policy
• Chad Pierskala - Ph.D. (University of Minnesota)
  Wildland recreation management and policy
• Peter V. Schaeffer - Ph.D. (University of Southern California)
  Regional science, Applied microeconomics
• Steven Selin - Ph.D. (University of Oregon)
  Human dimensions and Natural resources management
• Dennis K. Smith - Ph.D. (Pennsylvania State University)
  Rural development, Agribusiness management
• Jingxin Wang - Ph.D. (University of Georgia)
  Biomass logistics, utilization and bioenergy, forest BMPs

ASSOCIATE PROFESSORS
• Cheryl Brown - Ph.D. (University of California, Berkley)
  Agricultural and food policy and economics, Agribusiness
• Gregory A. Dahle - Ph.D. (Rutgers University)
  Arboriculture and urban forestry
• Jinyang Deng - Ph.D. (University of Alberta)
  Recreation, Parks, and Tourism; Recreation and Leisure Studies
• David DeVallance - Ph.D. (Oregon State University)
  Biomaterial processing, manufacturing, and development
• Kathryn Gazal - Ph.D. (Mississippi State University)
  Forest Economics
• Donald J. Lacombe - Ph.D. (Florida State University)
  Spatial econometrics, Public choice and industrial organization
• Jingjing Liang - Ph.D. (University of Wisconsin-Madison)
  Forest ecology and biodiversity
• Jamie Schuler - Ph.D. (North Carolina State University)
  Forest regeneration and restoration
• Kaushlendra Singh - Ph.D. (University of Georgia)
  Thermo-chemical conversion and bioenergy
• Dave Smaldone - Ph.D. (University of Idaho)
  Environmental and Cultural Interpretation, Nature-based tourism
• Mark Sperow - Ph.D. (Colorado State University)
  Production and resource economics
• Ben D. Spong - Ph.D. (Oregon State University)
  Forest operations, roads, and harvesting
• Michael P. Strager - Ph.D. (West Virginia University)
  Spatial analysis, Decision support
• Amy Welsh - Ph.D. (University of California-Davis)
  Conservation genetics and wildlife forensics
• Nicholas P. Zegre - Ph.D. (Oregon State University)
  Forest and watershed hydrology

ASSISTANT PROFESSORS
• Donald Brown - Ph.D. (Texas State University)
  Herpetology, wildlife ecology
• Levan Elbakidze - Ph.D. (Texas A&M)
  Shale gas; water and energy economics
• Xiaoli Etienne - Ph.D. (University of Illinois)
  Econometric methods in agriculture and energy
• Shawn Grushecky - Ph.D. (West Virginia University)
  Energy land management
• Christopher Lituma - Ph.D. (University of Tennessee)
  Ornithology and bird ecology
• Kudzayi Maumbe - Ph.D. (Michigan State University)
  Tourism Marketing
• Gloria S. Oporto - Ph.D. (University of Maine - Orono)
  Wood-based Composites and Bioproducts
• James S. Rentch - Ph.D. (West Virginia University)
  Forest ecology
• Kaushlendra Singh - Ph.D. (University of Georgia)
  Thermo-chemical conversion)
• Doolarie Singh-Knights - Ph.D. (West Virginia University)
  Agribusiness and entrepreneurship
• Heather Stephens - Ph.D. (Ohio State University)
  Resource and energy economics; regional development
• Mo Zhou - Ph.D. (University of Wisconsin)
  Forest Economics

ADJUNCT PROFESSORS
• Patricia M. Mazik - – Ph.D. (Memphis State University)
  Aquatic toxicology, fish physiology
• Sheldon Owen - Ph.D. (West Virginia University)
  Extension wildlife specialist
• Stuart A. Welsh - Ph.D. (West Virginia University)
  Ichthyology
• Petra B. Wood - Ph.D. (University of Florida)
  Avian ecology

VISITING ASSISTANT PROFESSORS
• Charlene Kelly - Ph.D. (Virginia Tech)
  Watershed biogeochemistry
• Kirsten Stephan - Ph.D. (University of Idaho)
  Soil and vegetation management

Graduate Certificate in GIS and Spatial Analysis

CERTIFICATE CODE - CG37

Required Courses
Select four of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ARE 729</td>
<td>Spatial Econometrics</td>
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<tr>
<td>or ECON 729</td>
<td>Spatial Econometrics</td>
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<tr>
<td>RESM 540</td>
<td>Geospatial Modeling</td>
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<tr>
<td>RESM 545</td>
<td>Spatial Analysis for Resource Management</td>
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<tr>
<td>RESM 640</td>
<td>Spatial Hydrology and Watershed Analysis</td>
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<tr>
<td>GEOG 550</td>
<td>Geographic Information Systems for Aquatic Resource Management</td>
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<tr>
<td>GEOG 651</td>
<td>Geographic Information Science: Technical Issues</td>
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<tr>
<td>GEOG 654</td>
<td>Environmental Geographic Information Systems Modeling</td>
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<tr>
<td>GEOG 655</td>
<td>Remote Sensing Principles</td>
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<tr>
<td>GEOG 752</td>
<td>Advanced Geographic and Information Science</td>
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<tr>
<td>GEOG 753</td>
<td>Exploratory Spatial Data Analysis</td>
</tr>
<tr>
<td>GEOG 755</td>
<td>Advanced Remote Sensing</td>
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Independent Study Requirement

Total Credits: 15
### RESM 585  
GIS and Spatial Analysis Project

| Total Hours | 15 |

*Students must take at least one of the course offerings from RESM/ARE/ECON (not counting RESM 585) and one from the GEOG course list.*