

Faculty of Environment
NRES Graduate Courses
September (Fall) 2025 Semester

800 level courses for PhD cohort

NRES 801 – Integrated Environmental Systems I (Brent Murray)
NRES 802 – Integrated Environmental Systems II (Zoe Meletis)

700 level courses

NRES 700 – Research in NRES (Dezene Huber, Jennifer Wigglesworth)
NRES 701 – Graduate Colloquia (Joseph Shea)
NRES 710 – Modeling and Simulation (Siraj ul Islam)
NRES 732 – Forest Systems & Management (Samuel Bartels)
NRES 776 – Advanced Statistical Analyses for the Natural Resource Sciences (Erin Crockett, Violet Zhao)
NRES 799 – Independent Study
ENGR 798 A1 – Green Engineering (Ron Thring)
ENGR 798 A2 – Cold Climate Engineering (Mohammad Kamali)

798/799 courses are created by supervisors who tailor them to their students. Students should discuss this with supervisors when necessary and contact instructors before registering for these courses.

Students continue to enroll in their thesis/project throughout their degree - NRES 790, 792, 793, 794, 890

600 level courses

These courses are offered within individual areas of study within NRES and are typically associated with senior undergraduate lecture courses. The courses can be taken for graduate credit – students should contact instructors if they are interested in registering for these courses.

BIOLOGY

BIOL 603 – Population and Community Ecology (Chris Johnson)
BIOL 604 – Wildlife Ecology (Heather Bryan)
BIOL 606 – Fish Ecology (Mark Shrimpton)
BIOL 623 – Molecular Evolution & Ecology (Jamie Gorrell)
BIOL 624 – Plant Ecology (Lisa Wood)

ENGINEERING

ENGR 640 – Advanced Structural Concrete Design (Asif Iqbal)
ENGR 641 – Special Topics: Bridge Engineering (Asif Iqbal)
ENGR 658 – Advanced Treatment Processes for Water and Wastewater (Oliver Iorhemen)
ENGR 672 – Advanced Pavement Engineering (Mohab El-Hakim)

ENVIRONMENTAL PLANNING

ENPL 606 – Philosophy of Community Change (Tara Clapp)

ENVIRONMENTAL SCIENCE

ENSC 608 – Storms (Parvin Ghafarian)
ENSC 618 – Environmental Measurement & Analysis (Theresa Adesanya)
ENSC 625 – Climate Change and Global Warming (Youmin Tang) - *online*
ENSC 650 – Environmental and Geophysical Data Analysis (Youmin Tang) - *online*

GEOGRAPHY

GEOG 603 – Indigenous Geographies of Climate Resilience (Tristan Pearce)
GEOG 605 – Fluvial Geomorphology (John Rex)
GEOG 611 – Glacial Geology (Adam Hawkins)
GEOG 616 – Mountains (Joseph Shea)
GEOG 620 – Environmental Justice (Zoe Meletis)
GEOG 650 – Advanced Geospatial Analysis (Joseph Shea)

INTEGRATED ENGINEERING

IENG 611 – Introduction to Wood as a Building Material (Jianhui Zhou)
IENG 613 – Wood Design I (Thomas Tannert)
IENG 614 – Building Acoustics and Vibration (Jianhui Zhou)
IENG 624 – Envelope Design (Maik Gehloff)
IENG 650 – CAD/BIM in the Construction Industry (Maik Gehloff)

NATURAL RESOURCES & ENVIRONMENTAL STUDIES

NRES 698 A1 – Wood Utilization (Ian Hartley)
NRES 698 A2 – Hydrology (Faran Ali)

NATURAL RESOURCE MANAGEMENT

NREM 615 – Forest Soils (Diogo Spinola)

OUTDOOR RECREATION AND TOURISM MANAGEMENT

ORTM 609 – Critical Approaches to Outdoor Recreation Activities (Philip Mullins)
ORTM 615 – Conservation, Culture and Society (Lauren Harding)

Methods Course Options – NRES 710, NRES 776, NRES 698 A2 – Hydrology, ENSC 618, ENSC 650, GEOG 605, GEOG 611, GEOG 650, IENG 650. *If you or your supervisor think an Engineering course should count as your methods course, please discuss this with Dr. Meletis, the NRES Graduate Program Coordinator.*

MNRES options for the Integrated Natural Resources course – NRES 732, NRES 798 A1 – Conservation, Culture and Society, NRES 698 A2 – Hydrology, ENGR 798 A1 – Green Engineering, ENPL 606, ENSC 625, GEOG 603, GEOG 616, NREM 615

NRES graduate students may also select from any graduate level courses across campus

e.g. **INTS 700 – Research Methods in Global Studies, GNDR 703 – Gender and Post-Colonialism, HIST 745 – Historical Methods and Approaches, INTS 698 – Gender, Peace and Security, POLS 613 – Democracy and Diversity, POLS 698 –Territory, Legitimacy and Decolonization;** and also graduate courses elsewhere via the Western Deans Agreement (and across Canada)

Faculty of Environment
NRES Graduate Courses
January (Winter) 2026 Semester

800 level courses for PhD cohort

NRES 803 – Integrated Environmental Systems III (Peter Jackson)
NRES 804 – Graduate Seminar (Lisa Wood)

700 level courses

NRES 701 – Graduate Colloquia (Dezene Huber)
NRES 773 – Advanced Qualitative Research Methodology (Zoe Meletis)
NRES 798 A1 – Anthropocene Environment (Raquel De Castro Portes)
NRES 798 / 799 – Special Topics / Independent Study
ENGR 798 A4 – Special Topics: Research Methods in Engineering (June Garcia-Becerra)
IENG 722 – Project Design II (Maik Gehloff)
IENG 723 – Wood Design II (Thomas Tannert)
IENG 727 – Wood Processing (Maik Gehloff)
IENG 729 – Structural Dynamics and Seismic Design (Fei Tong)
IENG 729 – Finite Element Analysis and Computational Engineering (Jianhui Zhou)

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Students continue to enroll in their thesis/project throughout their degree - NRES 790, 792, 793, 794, 890

600 level courses

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BIOLOGY

BIOL 601 – Conservation Biology (Erin Baerwald)
BIOL 602 – Fisheries Management (Mark Shrimpton)
BIOL 611 – Insects, Fungi and Society (Jonathan Cale)
BIOL 620 – Animal Behavior (Jamie Gorrell)
BIOL 625 – Applied Genetics and Biotechnology (Jasmine Janes)

ENGINEERING

ENGR 621 – Ecological Engineering Design (June Garcia-Becerra)
ENGR 638 – Rock Engineering (Wenbo Zheng)

ENVIRONMENTAL PLANNING

ENPL 604 – Housing: Concept to Construction (Tara Clapp) - *online*
ENPL 605 – Applied Land Use Planning in British Columbia (David Connell)
ENPL 617 – Local Climate Action Studio (Mark Groulx)

ENVIRONMENTAL SCIENCE

ENSC 604 – Waste Management (TBD)
ENSC 607 – Environmental Modelling (Jianbing Li)
ENSC 654 – Snow and Ice (Adam Hawkins)

ENVIRONMENTAL STUDIES

ENVS 602 – Environmental and Natural Resources Issues and Ethics (Annie Booth)
ENVS 631 – Global Environmental Policy: Energy and Climate (TBD)

FORESTRY

FSTY 605 – Forest Ecosystem Modelling (Che Elkin)
FSTY 635 – Soil Biological Processes and the Environment (Michael Preston)

GEOGRAPHY

GEOG 601 – Resource Geography (Devin Holterman)
GEOG 624 – Northern Communities (Greg Halseth)
GEOG 657 – Advanced Remote Sensing (TBD)

NATURAL RESOURCES MANAGEMENT

NREM 607 – Natural Resources Planning (Chris Johnson)

NATURAL RESOURCES & ENVIRONMENTAL STUDIES

NRES 698 A1 – Wildfire Ecology & Management (Violet Zhao)
NRES 698 A2 – Advanced Critical Development Geographies (Catherine Nolin)

Methods Course Options: NRES 773, ENGR 798 A4 –Special Topics: Engineering Research Methods, BIOL 625, ENSC 607, FSTY 605, GEOG 657. *If you or your supervisor think an Engineering course should count as your methods course, please discuss this with Dr. Meletis, the NRES Graduate Program Coordinator.*

MNRES options for the Integrated Natural Resources course: NRES 798 A1 – Anthropocene Environment, BIOL 601, BIOL 611, ENPL 604, ENPL 605, ENPL 617, ENVS 602, ENVS 631, ENSC 604, GEOG 601, NREM 607

NRES graduate students may also select from any graduate level courses across campus

e.g. **GEDR – Contemporary Feminist Theories**, **HIST – Environmental History of the Nuclear Age**, **POLS 627 – Ethics and Public Affairs**; and also graduate courses elsewhere via the Western Deans Agreement (and across Canada)