

Virginia Tech’s Executive Master of Natural Resources (XMNR) program engages a new generation of professionals to develop skills in leadership for sustainability. Each year, a new cohort of 20-30 students starts the program and begins a rigorous 14-month process of peer-to-peer experiential learning and collaborative problem-solving.

The XMNR program emphasizes the development of advanced leadership, management, and administrative skills for achieving local, regional, and global sustainability goals. Students graduate with competencies in leading people, leading change, business and political acumen, and demonstrated results for their respective employer. Immediate program outcomes include organizational and policy changes while long-term outcomes include personal and cultural transformation.

XMNR CORE COMPETENCIES

LEADERSHIP & INNOVATION

- Ethics and integrity
- Interpersonal skills
- Communication Team building
- Strategic thinking
- Vision and creativity
- Flexibility
- Problem solving
- Conflict management
- Entrepreneurship
- Building coalitions
- Political savvy
- Social movements
- Cultural transformation
- Global perspective

This core competency reflects strategic leadership skills as identified in public and private sector professional development programs such as Senior Executive Service of the Office of Personnel Management.

ENVIRONMENT & SUSTAINABILITY

- Earth systems
- Ecological services
- Climate and energy
- Land and water
- Biodiversity
- Population change
- Globalization
- Health, welfare, equity
- Risk and security
- Indicators and criteria
- Life cycle analysis
- Certification and standards
- Behavior change
- Planning and design
- Resilience

This core competency reflects multi-scale issues identified by organizations such as the Association for the Advancement of Sustainability in Higher Education (AASHE), National Council for Science and the Environment (NCSE), Ecological Society of America (ESA), US Green Building Council (USGBC), and Environmental Protection Agency (EPA).

MANAGEMENT & ADMINISTRATION

- Finance and accounting
- Human resources
- Technology
- Marketing
- Law and policy
- Critical analysis
- Strategic planning
- Negotiation
- Decision making
- Partnering
- Accountability
- Performance evaluations
- Adaptive management
- Market-based strategies
- Governance

This core competency reflects core requirements for graduate programs such as Master of Business Administration (MBA), Master of Public Administration (MPA), and Master of Organizational Development (MOD).