# Michigan Technological University College of Forest Resources and Environmental Science **MF Accreditation Pre-Enrollment and Completion Form** Standards determined by the Society of American Foresters

Due for <u>all MF students</u> to the MF Degree Program Director in your 2<sup>nd</sup> semester, signed before degree completion.

Name		Student ID	E-mail	
Semester/Year deg	ree expected	Michigan Teo	ch Advisor	
Bachelors				
It is your responsibili Schools website for accreditation standard that have not been cor requirements. These all be at a level of hi questions or see the S	Year ty to check with your the forms due and su is and indicate if they w mpleted. All SAF standar may be completed prior gher education, with a AF standard accreditati	University academic advisor and the ubmission deadlines. List the ere taken at Michigan Techo rd accreditation categories m to attending, or while an M in academic transcript. Plea ion handbook at <u>www.efores</u>	<b>CFRES website along</b> the courses to be con or another institution. Thust be satisfied to fulfi F student at Michigan ase contact your advis ster.org.	Major with the Graduate unted towards the Designate (*) those Il accredited degree Fech, but they must or if you have any
<u>List of Courses (does n</u> Gen Ed Standard	ot include research crea Course #'s	<u>dits)</u>		University/ Year(s) Taken
Communications				
Biological Sciences				
Physical Sciences				
Mathematics				
Social Sciences and Humanities				

CFRES- Society of American Foresters Accreditation Standard – Form for Master's of Forestry Students

#### Professional Education Standard

If coursework deviates from SAF accredited MF curriculum posted online, indicate the Course previously taken during first professional degree and list the additional professional education course taken during MF degree (30 credits required). You may be asked to provide a syllabus for any previous course to access course content.

\*\*Indicate any changes to student's curriculum plan during final degree check for Accreditation\*\* Previous

Course with Content that meets Standard	Additional course taken as MF beyond set curriculum		

Signature during the *second* semester of students coursework

MF Degree Program Director Date

The degree awarded to this student meets Accreditation Standards by the Society of American Foresters (check box):

Degree Program Director Use Only:

During the *last* semester of students coursework MF Degree Program Director Initial and Date: \_

## For Reference: Society of American Foresters 2017 Accreditation Standards for Forestry General Education

#### Communications

Oral and written communication skills must be developed throughout the curriculum. Students must have the following:

- 1. The ability to prepare and deliver effective oral presentations;
- 2. Proficiency in English composition, technical and business writing, and writing for nonprofessional audiences; and
- 3. the ability to read with comprehension and to understand, communicate, and critically evaluate multiple viewpoints.

### Science and Mathematics

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The curriculum must include mathematics and the biological and physical sciences.

- 1. Biological sciences. Students must understand the following: a. the components, patterns, and processes of biological and ecological systems across spatial and temporal scales; and b. molecular biology, cells, organisms, populations, species, communities, and ecosystems.
- 2. Physical sciences. Students must have an understanding of physical and chemical properties, measurements, structure, and states of matter.
- 3. Mathematics. Students must know and be able to use the basic approaches and applications of mathematics and statistics for analysis and problem solving, as appropriate for the program's stated outcomes.

#### **Social Sciences and Humanities**

The social sciences and humanities are critical components of a professional education. Students must demonstrate the following:

- 1. the ability to address moral and ethical questions and use critical reasoning skills;
- 2. an understanding of human behavior and social and economic structures, processes, and institutions of importance across abroad range of societies; and
- 3. an appreciation for the diverse dimensions of the human experience and culture

#### **Professional Education**

## A. Ecology and Biology

Students must - demonstrate the following competencies:

- 1. an understanding of taxonomy and an ability to identify forest and other tree species, their distribution, and associated vegetation and wildlife;
- 2. knowledge of soil properties and processes, hydrology, water quality, and watershed functions;
- 3. an understanding of ecological concepts and principles, including the structure and function of ecosystems, plant and animal communities, competition, diversity, population dynamics, succession, disturbance, and nutrient cycling;
- 4. an ability to make ecosystem, forest, and stand assessments; and
- 5. knowledge of tree physiology and the effects of climate, fire, pollutants, moisture, nutrients, genetics, insects and diseases on tree and forest health and productivity.

#### B. Measurement of Forest Resources

Students must demonstrate the following competencies:

- 1. an ability to identify and measure land areas and conduct spatial analysis;
- 2. an ability to design and implement comprehensive inventories that meet specific objectives using appropriate sampling methods and units of measurement; and
- 3. an ability to analyze inventory data and project future forest, stand, and tree conditions.

#### C. Management of Forest Resources

Students must demonstrate the following competencies:

- 1. an ability to develop, apply, and understand the effects of silvicultural prescriptions appropriate to management objectives, including methods of establishing and influencing the composition, growth, and quality of forests;
- 2. an ability to analyze the economic, environmental, and social consequences of forest resource management strategies and decisions;
- 3. an ability to develop management plans with specific multiple objectives and constraints;
- 4. an understanding of the valuation procedures, market forces, processing systems, transportation and harvesting activities that translate human demands for timber-based and other consumable forest products into the availability of those products;
- 5. an understanding of the valuation procedures, market, and non-market forces that avail humans the opportunities to enjoy non-consumptive products and services of forests; and

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6.an understanding of the administration, ownership, and organization of forest management enterprises.

# D. Forest Resource Policy, Economics, and Administration

Students must demonstrate the following competencies:

- 1. an understanding of forest policy and the processes by which it is developed;
- 2. knowledge of how federal, state, and local laws and regulations govern the practice of forest resource management;
- 3.an understanding of professional ethics, including the SAF Code, and recognition of the responsibility to adhere to ethical standards in decision making on behalf of clients and the public; and
- 4. an understanding of the technical, financial, human resources, and legal aspects of public and private enterprises.