

Exhibit M8.1: National Requirements for Being an Advanced Mathematics Teacher in the Final Year of School

Reported by National Research Coordinators

Country	Requirements
France	Teachers must be qualified to teach secondary school. Secondary school teachers must hold a master's degree and pass the competitive national examination.
Italy	Teachers must be officially qualified to teach mathematics in upper-secondary school (graduate in mathematics or physics, statistics, etc. and have a certification for teaching mathematics, released by a university after a 1-year course for teaching qualification).
Lebanon	Teachers must hold a bachelor's degree in mathematics, as well as a teaching diploma.
Norway	Teachers are required to have at least a university bachelor's degree and have taken at least 1 full year (60 credit points) of mathematics courses. They also need 1 year of teacher education courses, consisting of general pedagogy, mathematics education, and teaching practice in schools. These courses may be taken separately after finishing subject studies, or as an integrated part. The current tendency is that a full master's degree will be required.
Portugal	Fully qualified advanced mathematics teachers must have at least a Master of Science degree in mathematical education, which includes a professional internship. They must pass both a general knowledge and a specific (mathematics) teachers' qualifying examination.
Russian Federation	Teachers must have a university degree in mathematics education, or any university degree and certificate of additional courses in mathematics education. There are no official requirements for being a teacher of advanced mathematics. Beginning in 2017, according to the new professional standards, teachers of advanced mathematics should have at least a master's degree.
Slovenia	All teachers must have an appropriate university degree, pedagogical training, and have successfully completed the teaching certification examination. Teachers for the advanced mathematics program should have a second-level university degree, which means 5 years of mathematics university study, including pedagogical courses.
Sweden	Teachers must be licensed through a teacher education program. To become a mathematics teacher in upper-secondary school you need at least 1.5 years of mathematics courses at a university. You also need 1.5–2 years of tertiary level studies in one more subject, and 1.5 years of courses in specific and general education. In total, 300 credits for 5–5.5 years are required. After finishing a teacher education program, prospective teachers apply for a license at the Swedish National Agency for Education.
United States	All public school teachers must be licensed by their state's department of education, and requirements for licensure vary by state. Secondary school mathematics teachers may have a bachelor's degree in mathematics (and possibly a master's degree in education), or a double major in mathematics and education. Additionally, all teachers must be highly qualified, which includes demonstrating of expertise in their subject area by either passing a subject test or completing an undergraduate degree, completing a graduate degree, completing coursework equivalent to an undergraduate major, or completing advanced certification or credentialing.

SOURCE: IEA's Trends in International Mathematics and Science Study – TIMSS Advanced 2015