



Specific Qualifications of the Program
Master of Science Program in Applied Chemistry
Academic Year 2026

Faculty	Engineering and Agro-Industry		
Number of Admissions:	Plan A Type A (1) (Regular Program)		2 persons
	Plan A Type A (2) (Regular Program)		2 persons

Specific Qualifications:

1) Applicants must not have been dismissed from any educational institution due to misconduct, and must be in good physical health without any diseases that would be an obstacle to their studies.

2) Applicants must have completed a Bachelor's degree or its equivalent in Science, Engineering, Chemistry, Industrial Chemistry, Geology, Physics, Biology, Biotechnology, Botany, Genetics, or other related fields, with a cumulative grade point average (GPAX) of not less than 3.00 throughout the course; or

3) Applicants who have graduated as specified in Item 2 but have a cumulative grade point average (GPAX) of not less than 2.50 must have at least one published research work or have at least one year of relevant work experience in chemistry or related fields;

4) Other cases shall be at the discretion of the Student Selection Committee.

Guidelines for Graduate Thesis
Master of Science Program in Applied Chemistry
Academic Year 2026

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| Topic 1 | Biosensor for the Detection of Alpha-Ketoglutarate Using Glutamate Dehydrogenase Coupled with Nanotechnology Functionalization
Chair of Advisory Committee: Asst. Prof. Dr. Tanin Tangkuaram |
| Topic 2 | Analysis of Natural Antioxidants by Chromatographic Methods
Chair of Advisory Committee: Asst. Prof. Dr. Supaporn Sangsrichan |
| Topic 3 | Development of Glass-Ceramic Solid Electrolytes for Batteries
Chair of Advisory Committee: Asst. Prof. Dr. Nattapol Laorodphan |
| Topic 4 | Development of Glass-Ceramic Sealants for Planar Solid Oxide Fuel Cells
Chair of Advisory Committee: Asst. Prof. Dr. Nattapol Laorodphan |

- Topic 5** Metal Oxide–Reduced Graphene Oxide Nanocomposites and Their Electrical Properties as Anode Materials for Lithium-Ion Batteries
Chair of Advisory Committee: Asst. Prof. Dr. Ratchadaporn Puntharod
- Topic 6** Study on the Synthesis of NASICON-type Materials for Energy Applications
Chair of Advisory Committee: Asst. Prof. Dr. Weerinradah Tapala
- Topic 7** Fabrication of Microfluidic Devices Integrated with Chemiluminescence Detection
Chair of Advisory Committee: Assoc. Prof. Dr. Sakchai Satienperakul
- Topic 8** Enhancing the Stability of Essential Oils and Plant Extracts by Encapsulation Techniques
Chair of Advisory Committee: Assoc. Prof. Dr. Thitiphan Chimsoo
- Topic 9** Synthesis of NASICON-type Materials by Chemical Methods for Electrochemical Applications
Chair of Advisory Committee: Asst. Prof. Dr. Phetlada Kunthadee
- Topic 10** Formulation and development of fat and oil products
Chair of Advisory Committee: Asst. Prof. Dr. Anakhaorn Srisaiech
- Topic 11** Development of Two-Dimensional Hybrid Nanofiber-Based Gas Sensors for Volatile Organic Compounds for Smart Agricultural Applications
Chair of Advisory Committee: Assoc. Prof. Dr. Viruntachar Kruefu

Required Application Documents:

- A digital file of a straight-face photograph, size 1 inch (300 x 400 pixels), without a hat or dark glasses, taken within the last 6 months; graduation gown photos are not permitted (to be uploaded to the application system).
- A copy of the passport (only the first page with personal information).
- A copy of the undergraduate transcript.
- A copy of the document showing name/surname change, or marriage certificate (in case the name/surname does not match other application documents).
- A certificate of student status for those in the final semester of their undergraduate program.
- Proposed Research Project Outline.

Tuition Fees:

For more information about tuition fees, please visit the website:

<https://admissions.mju.ac.th/graduate/en/Default.aspx> and select the appropriate menu >> **Tuition Fee (Master)**