

Programme Educational Objectives of MJIT

PEO 1: Generate innovative ideas or products in local or international industry or government and work in multidisciplinary teams in implementing these solutions in practice.

PEO 2: Establish themselves in a diverse range of careers in technology-driven transdisciplinary field with Japanese work culture or engage in business opportunities.

PEO 3: Demonstrate ethical responsibility through involvement with community and/or professional organization and/or contribute towards a sustainable society.

PEO 4: Recognize the importance of and engage in life-long learning through formal graduate-level education.

Programme Outcomes of MJIT with Teaching and Learning Methods, and Respective Assessment

Programme Outcomes (PO)			
PO	Intended Learning Outcomes	Teaching and Learning Methods	Assessment
Technology Knowledge & Competencies			
PO1	Engineering Knowledge (KW) Ability to apply knowledge of mathematics, science, engineering fundamentals and Mechanical Precision Engineering (MPE) to the solution of complex engineering problems.	Lectures, tutorials, laboratory works, project supervision, cooperative learning (CL), and problem-based learning (PBL).	Examination, laboratory (reports), individual or group assignments, individual or group projects, CL, PBL (problem based learning).
PO2	Problem Analysis (THPA) Ability to identify, formulate, analyse and research literature on complex engineering problems to reach substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.	Laboratory works, tutorials, workshops, project supervision, cooperative learning (CL), and problem-based learning (PBL).	Examination, laboratory (reports), individual or group assignments (solutions), individual or group projects (solutions), CL (solutions), PBL (problem based learning).
PO3	Design/Development (THDS) Ability to design and develop MPE solutions to complex engineering problems that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.	Lectures, tutorials, laboratory works, project supervision, cooperative learning (CL), and problem-based learning (PBL), <i>ikohza</i> . (<i>ikohza</i> is referred to as a strong research group which is responsible for the continuous teaching and learning of subjects and laboratory works).	Examination, laboratory (reports), individual or group assignments (solutions), individual or group projects (solutions), CL (solutions), PBL (problem solutions), <i>ikohza</i> work.

Generic Skills			
P04	<p>Investigation (THI)</p> <p>Ability to conduct investigation into complex problems on MPE using research based knowledge and research methods learned in iKohza and synthesis of information to provide valid conclusions.</p>	Lectures, tutorials, laboratory works, project supervision, cooperative learning (CL), and problem-based learning (PBL).	Examination, laboratory (reports), individual or group assignments, individual or group projects, CL, PBL (problem based learning).
P05	<p>Modern Tool Usage (SCMT)</p> <p>Ability to apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling to complex engineering activities with an understanding of the limitations.</p>	Lectures, laboratory works, project supervision, cooperative learning (CL), and problem-based learning (PBL).	Examination, laboratory (reports), individual or group assignments, individual or group projects, CL, PBL (problem based learning).
P06	<p>The Engineer and Society (AD)</p> <p>Ability to apply contextual knowledge to assess societal, health, safety, legal and cultural issues and his/her responsibilities relevant to professional engineering practice.</p>	Lectures, invited seminars, project supervisions, industrial attachments	Individual or group projects (solutions), industrial attachment (report and industry evaluation).
P07	<p>Environment and Sustainability (GSC)</p> <p>Ability to explain, compare and summarize the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.</p>	Lectures, invited seminars, project supervisions, industrial attachments.	Individual or group projects (solutions), industrial attachment (report and industry evaluation).
P08	<p>Ethics (GSE)</p> <p>Ability to apply ethical principles and commit to professional ethics, responsibilities and norms of engineering practice, in multicultural society based on Islamic, ASEAN and Japanese cultures.</p>	Lectures, laboratory works, project supervisions.	Examination, laboratory (reports and in-lab performance), individual or group projects (reports), final year survey/interview, course/instructor evaluation.
P09	<p>Communication (CS)</p> <p>Ability to communicate effectively on complex engineering activities with the engineering community and with society at large, sometimes in Japanese.</p>	Lectures, laboratory works, project supervision, cooperative learning (CL), and problem-based learning (PBL).	Examination, laboratory (reports), individual or group assignments, individual or group projects, CL, PBL (problem based learning).
P10	<p>Individual and Team Work (TW)</p> <p>Ability to function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings.</p>	Tutorials, laboratory works, project supervision, active learning (AL), cooperative learning (CL), and problem-based learning (PBL).	Laboratory (reports, in-lab performance, presentation), individual or group projects (reports and presentation), AL (participation), CL (peer review), PBL (peer review, reports and presentations).

P011	<p>Life-Long Learning (SC)</p> <p>Ability to recognise the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.</p>	Lecture, laboratory works, project supervisions, problem-based learning (PBL).	Laboratory (reports), individual or group projects (solutions, reports and presentation), PBL (solutions, reports and presentation), final year survey/interview, course/instructor evaluation, results of professional engineering exam.
P012	<p>Engineering Project Management and Finance (ES)</p> <p>Ability to demonstrate knowledge and understanding of engineering and management principles and apply these to one's own work.</p>	Tutorials, laboratory works, cooperative learning (CL), and problem-based learning (PBL).	Laboratory (in-lab performance), CL (peer review), PBL (problem based learning), peer review.

*Note: KW = Engineering Knowledge; THPA = Thinking Skills-Problem Analysis; THDS = Thinking Skills Design/Development of Solution; THI =Thinking Skills-Investigation; SCMT = Scholarship Modern Tool Usage; AD = Global Citizen Adaptability; GCS = Global Citizen Sustainability; GCE = Global Citizen Ethics; CS = Communicating Skills; TW = Leadership and Team Working; SC = Life Long Learning; ES = Enterprising Skills.