

Module designation	CEM120 Problem Formulation CEM121 Implementation of Research Methodology CEM122 Evaluation CEM123 Scientific Publications
Semester(s) in which the module is taught	7
Person responsible for the module	Samuel Hutagalung, Dareen Kusuma Halim
Language	Indonesian
Relation to curriculum	Elective 4
Teaching methods	Project Based
Workload (incl. contact hours, self-study hours)	Total workload: - 906.66 hours (project & documentation report)
Credit points	33.58 ECTS CEM120 Problem Formulation (4) CEM121 Implementation of Research Methodology (7) CEM122 Evaluation (4) CEM123 Scientific Publications (5)
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	Module objectives: Students can conduct scientific research with the right methodology to identify a real problem in industry or society and create accurate solutions, as well as publish the result in a scientific journal. ELO (Performance Indicator) : <ul style="list-style-type: none"> • E1 - Ability to conduct scientific research in accordance with appropriate scientific methods, principles, procedures, and ethics. • E2 - Ability to apply academic writing. • F1 - Ability to construct solutions with logical, critical, and systematic thinking based on analytically-identified problems.

Content	This course includes the process of direct research guidance by researchers from research institutions outside the university to solve real problems in industry or society.
Examination forms	Project, Portfolio
Study and examination requirements	<p>CEM120 Problem Formulation</p> <ul style="list-style-type: none"> - 50% Company Evaluation - 50% Advisor Evaluation <p>CEM121 Implementation of Research Methodology</p> <ul style="list-style-type: none"> - 70% Company Evaluation - 20% Advisor Evaluation - 10% Examiner Evaluation <p>CEM122 Evaluation</p> <ul style="list-style-type: none"> - 70% Company Evaluation - 20% Advisor Evaluation - 10% Examiner Evaluation <p>CEM123 Scientific Publications</p> <ul style="list-style-type: none"> - 70% Company Evaluation - 20% Advisor Evaluation - 10% Examiner Evaluation <p>The total weighted average score must be ≥ 55</p>
Reading list	MBKM - Research Handbook