MASTER STUDY PROGRAM OF CHEMISTRY
UNIVERSITAS BENGKULU
CURRICULUM
SK Nomor 1888/UN30/HK/2016

Tabel 1. Capaian Pembelajaran (CPL)/ Intended Learning Outcomes (ILO)
Prodi Magister Kimia FMIPA Unib

	CPL	Garis Besar Capaian Pembelajaran Prodi Magister Kimia FMIPA Unib/ILO
Pengetahuan dan Pemahaman (Knowledge and understanding)	CPL-1	Menguasai teori struktur dan sifat, energetika, kinetika, analisis, sintesis mikro dan makromolekul serta penerapannya (understanding the theory of structure and properties, energy, kinetics, analysis, synthesis of micro and macromolecules and their application)
	CPL-2	Menguasai konsep teoretis tentang fungsi instrumen kimia mutakhir dan cara pengoperasiannya, serta menguasai penerapan teknologi kimia yang relevan (Understanding theoretical concepts about the function of the latest chemical instruments and how to operate them, as well as having an ability the application of relevant chemical technology)
Keterampilan (Skills)	CPL-3	Mampu melakukan pendalaman atau perluasan keilmuan kimia atau kimia terapan dengan menghasilkan model/metode/pengembang-an teori yang akurat, teruji dan inovatif (Having an ability to expand the science of chemistry or applied chemistry by producing models/methods/theory developments that are accurate, tested and innovative)
	CPL-4	Mampu memecahkan masalah ipteks terkait dengan struktur, sifat, dan perubahan kimia pada tingkat mikro- maupun makromolekul, melalui pendekatan eksperimen, deduksi teoretis atau komputasi/simulasi, dan pendekatan secara inter- atau multidisiplin, dicirikan dengan dihasilkannya karya yang berpotensi untuk diterapkan dalam memecahkan masalah ipteks tersebut

		(having an ability to solve science and technology problems related to the structure, properties, and chemical changes at the micro- and macromolecular level, through experimental approaches, theoretical deduction or computations/simulations, and inter- or multidisciplinary approaches, characterized by the production of works that have the potential to be applied in solving the science and technology problem)
	CPL-5	Mampu merancang dan melaksanakan penelitian dengan metodologi yang tepat dan benar serta menganalisis dan menginterpretasi data dengan tepat (having an ability to design and carry out research with the right and correct methodology as well as analyze and interpret data appropriately)
	CPL-6	Mampu mengaplikasikan dan menguasai pengetahuan konsep/teknologi ilmu kimia khususnya dibidang pemanfaatan bahan alam, kimia material dan katalisis, dan kimia analisis terapan (having an ability to apply and master the knowledge of concepts/technology in chemistry, especially in the field of utilization of natural products, materials chemistry and catalysis, and applied analytical chemistry)
	CPL-7	Mampu menerapkan ilmu kimia dalam rangka untuk membantu memecahkan permasalaan dan kebutuhan masyarakat pesisir dan wilayah hutan hujan tropis dalam meningkatkan taraf hidup masyarakat (having an ability to apply chemistry in order to help solve the problems and needs of coastal communities and tropical rainforest areas in improving people's lives)
	CPL-8	Mampu mengkomunikasikan secara aktif hasil-hasil pengembangan ilmu pengetahuan dan teknologi baik tertulis maupun verbal dengan menjunjung tinggi etika ilmiah dan membuka diri terhadap kritik yang membangun (having an ability to actively communicate the results of the development of science and technology both written and verbal by upholding scientific ethics and opening up to constructive criticism)
Otonomi dan tanggung jawab (Autonomy and responsibility)	CPL-9	Menerapkan sikap bertanggungjawab atas pekerjaan di bidang keahliannya secara mandiri (Implement a responsible attitude towards work in their area of expertise independently)
	CPL-10	Mampu melakukan perluasan keilmuan kimia atau kimia terapan yang bermanfaat bagi masyarakat dan keilmuan, serta mampu mendapatkan pengakuan nasional maupun internasional (having an ability to expand the science of chemistry or applied chemistry that is beneficial to society and science, and is able to gain national and international recognition)

Tabel 2. Kurikulum Prodi Magister Kimia FMIPA Unib/Curriculum

Semester 1				Semester 2			
No	**Kode MK C-Code**	**Mata Kuliah/Courses**	**SKS**	**No**	**Kode MK C-Code**	**Mata Kuliah/Courses**	**SKS**
1	MIK-112	Kimia Analitik Lanjut/ Advanced Analytical Chemistry	2	1	MIK-122	Analisis Spektrofotometri dan Kromatografi lanjut/ Advanced Spectrophotometric Analysis and Chromatography	2
2	MIK-212	Kimia Anorganik Lanjut/ Advanced Inorganic Chemistry	2	2	MIK-222	Elusidasi Struktur Material Anorganik/ Elucidation of the Structure of Inorganic Materials	2
3	MIK-312	Kimia Fisik Lanjut/ Advanced Physical Chemistry	2	3	MIK-322	Elusidasi Struktur Senyawa Organik Lanjut/ Advanced Elucidation of the Structure of Organic Compounds	2
4	MIK-412	Kimia Organik Lanjut/ Advanced Organic Chemistry	2	4	MIK-422	Metodologi Penelitian Kimia/ Research Methodology in Chemistry	2
5	MIK-512	Bioteknologi/ Biotechnology	2	5	MIK-522	Kimia Industri/ Chemical Industry	2
6		Mata Kuliah Pilihan 1/ Selective Courses 1	2	6		Mata Kuliah Pilihan 3/ Selective Courses 3	2
7		Mata Kuliah Pilihan 2/ Selective Courses 2	2	7		Mata Kuliah Pilihan 4/ Selective Courses 4	2
		Jumlah SKS	**14**			**Jumlah SKS**	**14**

Semester 3				Semester 4			
No	**Kode MK C-Code**	**Mata Kuliah/Courses**	**SKS**	**No**	**Kode MK C-Code**	**Mata Kuliah/Courses**	**SKS**
1	MIK-131	Ujian Proposal Tesis/ Thesis Proposal Examination	1	1	MIK-142	Ujian Komprehensif/ Comprehensive Examination	2
2	MIK-231	Ujian Draft Tesis/ Thesis Draft Examination	1	2	MIK-244	Tesis/ Thesis	4
		Jumlah SKS	**2**			**Jumlah SKS**	**6**

No	Kode MK	Mata Kuliah Pilihan / Selective Courses Semester Ganjil/ odd semester	SKS	No	Kode MK	Mata Kuliah Pilihan/ Selective Courses Semester Genap/ even semester	SKS
1	MIK-152	Analisis Spesiasi/ Speciation Analysis	2	1	MIK-462	Agrokimia/ Agrochemistry	2
2	MIK-252	Bioaktivitas Bahan Alam dan Sintetis/ Bioactivity of Natural and Synthetic Materials	2	2	MIK-562	Enzimologi/ Enzymology	2
3	MIK-352	Elektrokimia/ Electrochemistry	2	3	MIK-662	Fitofarmaka/ Phytopharmaka	2
4	MIK-452	Geokimia dan Mineralogi/ Geochemistry and Mineralogy	2	4	MIK-762	Kimia Analisis Terapan/ Applied Analytical Chemistry	2
5	MIK-552	Kimia Farmasi/ Pharmaceutical Chemistry	2	5	MIK-172	Kimia Antar Muka/ Interface Chemistry	2
6	MIK-652	Kimia Keramik dan Komposit/ Ceramic and Composite Chemistry	2	6	MIK-272	Kimia Bahan Pangan/ Foodstuff Chemistry	2
7	MIK-752	Kimia Lingkungan dan Pencemaran/ Environmental Chemistry and Pollution	2	7	MIK-372	Kimia Katalis/ Catalytic Chemistry	2
8	MIK-162	Kimia Material/ Materials Chemistry	2	8	MIK-472	Kimia Komputasi/ Computational Chemistry	2
9	MIK-262	Kimia Organik Bahan Alam/ Natural Product of Chemistry	2	9	MIK-572	Kimia Korosi/ Corrosion Chemistry	2
10	MIK-362	Kimia Polimer/ Polymer Chemistry	2	10	MIK-672	Nanoscience dan Nanoteknologi/ Nanoscience and Nanotechnology	2
				11	MIK-772	Reaksi dan Sintesis Senyawa Organik/ Reaction and Synthesis of Organic Chemistry	2

REGULATIONS OF THE RECTOR OF THE UNIVERSITY OF BENGKULU

NUMBER 1888/UN30/HK/2016

CONCERNING

CURRICULUM FOR THE MASTER'S DEGREE IN CHEMISTRY