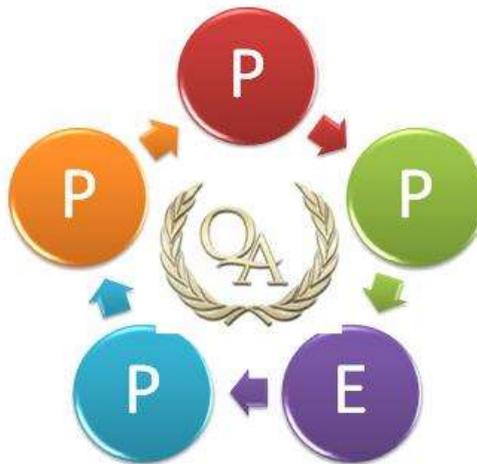




**Standard of Internal Quality Assurance System (SPMI)
Faculty of Mathematics and Natural Sciences
Andalas University**

STANDARD OF CURRICULUM

SM-01-01



Budaya Mutu untuk Daya Saing Regional

**Faculty of Mathematics and Natural Sciences
Andalas University**

2018

Limau Manis Campus, Padang – 25163

PREFACE

We extend praise to God Almighty, for his permission, the Internal Quality Assurance Document of the Faculty of Mathematics and Natural Sciences, Andalas University: This Curriculum Standard can be completed and published.

This curriculum standard was created in order to improve the quality of higher education at the Andalas University FMIPA in a planned and sustainable manner; guidelines for quality organizations in the implementation of SPMI at the faculty level and departments / study programs; and guidelines for faculty and department leaders and staff in implementing the stipulated SPMI standards. Curriculum Standards contain standards for graduate learning outcomes, which include elements of attitudes and values, mastery of knowledge, special skills, and general skills and soft skills.

This Curriculum Standard is prepared by the Formulation Team which involves Members of the Quality Control Cluster (GKM) Department of Study Programs and the Internal Quality Assurance Agency of FMIPA Unand and is expected to be used as a reference in the preparation of plans, organizing, monitoring and evaluating academic activities for academic community institutions in improving quality in terms of quality sustainable especially in the Faculty of Mathematics and Natural Sciences Andalas University.

Padang, June 20th, 2018

Head of BAPEM



Dr. Harmadi
NIP. 197112221999031001

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CURRICULUM STANDARD CONTENTS

1. Definition

- 1) Indonesian National Qualification Framework (KKNI) is a framework for qualifying competency classification that can juxtapose, equalize and integrate between the field of education and job training in order for granting the recognition of work competence in accordance with the structure jobs on various sectors.
- 2) The graduate competency standard is a minimum criterion about the qualifications of graduates' abilities that include attitudes, knowledge, and skills stated in the formulation of graduate learning outcomes abbreviated with CPL.
- 3) Graduates' competency standards stated in the formulation CPL is used as the primary reference for developing learning content standards, learning process standards, learning assessment standards, lecturer and staff standards education, learning facilities and infrastructure standards, learning management standards, and financing standards learning.
- 4) The curriculum is a set of plans and arrangements regarding CPL, study materials, processes, and assessments used as guidelines for organizing study programs.
- 5) Competence is the accumulation of one's abilities to carry out a measurable job description through structured assessment, covering aspects of independence and individual responsibility in the field of work.
- 6) Learning outcomes are internalization and accumulation science, skills, affections, and competencies achieved through a structured and encompassing educational process, a particular field of expertise / expertise, or through experience work.
- 7) Competency standard of graduates is a minimum criterion about the qualifications of graduates' abilities that include attitudes, knowledge, and skills stated in the formulation of graduate learning outcomes.
- 8) Attitude is right and cultured behavior as a result of internalization and actualization of values and norms that are reflected in spiritual and social life through the learning process, student work experience, research and / or service to the community related to learning.
- 9) Core values are a set of individual, group/organization, or community that will guide in decision making and determining action.
- 10) Knowledge is mastery of concepts, theories, methods, and / or philosophy in specific fields of science systematic obtained through reasoning in the process learning, student work experience, research, and / or community service learning.
- 11) Skills are the ability to do performance by using concepts, theories, methods, materials, and / or instruments, obtained through learning, student work experience, research and / or service to the community related to learning.
- 12) Soft skills are changes in behavior or approach the development of behavior designed to balance the realm of knowledge, attitudes, and skills to form personal character or quality.

2. Rational Curriculum Standards

The direction of developing FMIPA UNAND education is to produce nationally competitive and highly competitive graduates recognition at the ASEAN level. Educational development direction FMIPA was derived from the direction of the development of UNAND education, which is to produce graduates who have global competitiveness, the

spirit of entrepreneurship, and the character of Andalasian. Implementation FMIPA UNAND education must be implemented in accordance with the Regulations Minister of Research, Technology, and Higher Education Number 44 the year 2015 Concerning National Higher Education Standards (SN-Dikti).

In an effort to fulfill the SN-Dikti and adopt a framework for quality assurance in tertiary education in ASEAN (framework for quality assurance in higher education within ASEAN), the UNIP FMIPA has curriculum standards to be implemented and developed on an ongoing basis. With the fulfillment of curriculum standards set by BAPEM FMIPA UNAND, the learning process will be more directed by the lecturer to achieve the mission, goals, and objectives of the study program education.

3. Statement of Content on Curriculum Standards

- 1) Head of Department and Head of Study Program must actively participate in regular meetings about curriculum development implemented by the association / consortium of study programs, and the results are socialized to the lecturer.
- 2) Head of Department and Head of Study Program compile curriculum study programs that meet the SN-Dikti and adopt criteria AUN-QA.
- 3) Head of Department and Head of Study Program develop curriculum by taking into account: a) KKN level; b) manuscript academic associations / consortia of similar study programs; c) UNAND's core values; d) scientific vision of study programs; e) needs stakeholders, and f) expected to learn outcomes according to AUN-QA criteria.
- 4) Head of Department and Head of Study Program compile profile graduates, CPL, study materials and subjects, courses, and well-documented curriculum structure.
- 5) The Head of the Department and the Chair of the Study Program determine the CPL consists of elements: a) attitudes and values; b) mastery knowledge; c) special skills; and d) skills general and soft skills.
- 6) Head of Department and Head of Study Program socialize CPL to the lecturer so that it becomes a reference in the preparation course learning outcomes (CPMK).
- 7) Head of Department and Head of Study Program determine courses and weight of credits in group areas of expertise based on the study material detailed in the subject.
- 8) The Head of the Department and the Chair of the Study Program determine the achievements learning final project (CPTA) in the context of development attitudes and values, knowledge, special skills, general skills, and soft skills
- 9) The Chair of the Department submits the curriculum design to the dean to get input from the faculty senate and decrees by the chancellor.
- 10) The Head of the Department proposes an improvement / revision of the curriculum is running to the dean by attaching the minute majors meeting.
- 11) The lecturer prepares CPMK, which includes elements of a) attitude and value system; b) mastery of knowledge; c) special skills; and d) general skills and soft skills, with pay attention to the CPL set by the study program.
- 12) Lecturers pour out CPMK in the learning design semester (RPS), which is validated by the chairman of the field of expertise and approved by the head of the study program.
- 13) The Chair of the Study Program outlines the CPTA in the Guidelines or Final Assignment Guide, based on department meeting agreement.

4. Strategies for Implementing Curriculum Standards

- 1) BAPEM designs the contents of curriculum standards that will be applied to all study programs.
- 2) The contents of curriculum standards are determined by BAPEM after obtaining agreement by the Dean, Deputy Dean I, Head of Departments, and Chair of the Study Program.
- 3) BAPEM is accompanied by the Head of the Department and the Head of the Study Program to socialize the contents of the curriculum standard to the lecturers.
- 4) Head of Department, Head of Study Program, and group lecturers in the field of expertise implement the contents of curriculum standards.
- 5) BAPEM evaluates the implementation of curriculum standards by the head of the study program and their implementation by the lecturer through an audit internal quality (AMI).
- 6) BAPEM controls the failure to achieve or deviate the implementation of curriculum standards through requests for corrective action (PTK) to the deans and heads of departments.
- 7) BAPEM improves curriculum standards after all standard content has been met in one or several quality cycles.

5. Indicator of Achievement of Curriculum Standard Content

- 1) Percentage of study programs that have met CPL standards.
- 2) Percentage of courses

6. Responsible Parties Achieve Curriculum Standards

The parties responsible for achieving the contents of curriculum standards, namely:

- 1) Dean;
- 2) Deputy Dean I;
- 3) Head of Department;
- 4) Chair of the Study Program;
- 5) Chair of the expertise group; and
- 6) Lecturer.

7. References

- 1) Panduan Penyusunan Kurikulum Pendidikan Tinggi. Kementerian Riset, Teknologi dan Pendidikan Tinggi. Direktorat Pembelajaran dan Kemahasiswaan. Direktorat Pembelajaran. Jakarta. 2016.
- 2) Guide to AUN-QA Assessment at Programme Level. Version 3.0. ASEAN University Network (AUN), Chulalongkorn University, Bangkok, Thailand, 2015.
- 3) Manmohan Joshi. 2017. Soft Skills. 1st edition. bookboon.com



**KEPUTUSAN DEKAN
FAKULTAS MIPA UNIVERSITAS ANDALAS
Nomor : 131 /XIII/D/FMIPA/2018**

Tentang

**PENUNJUKAN/PENGANGKATAN PANITIA
DAN TIM PENYUSUN DOKUMEN STANDAR KURIKULUM
SISTEM PENJAMINAN MUTU INTERNAL (SPMI)
FAKULTAS MIPA UNIVERSITAS ANDALAS TAHUN 2018**

DEKAN FAKULTAS MIPA UNIVERSITAS ANDALAS

- Menimbang :**
- a. Bahwa dalam rangka peningkatan mutu pendidikan tinggi secara berencana dan berkelanjutan di Fakultas MIPA Universitas Andalas, maka perlu dirumuskan dan disusunnya Dokumen Standar Kurikulum Sistem Penjaminan Mutu Internal (SPMI) Fakultas MIPA Universitas Andalas Tahun 2018;
 - b. Bahwa untuk kelancaran pelaksanaan kegiatan pada butir "a" di atas, dirasa perlu menunjuk dan mengangkat Panitia dan Tim Penyusun Dokumen Standar Kurikulum Kebijakan Sistem Penjaminan Mutu Internal (SPMI) Fakultas MIPA Universitas Andalas Tahun 2018.
- Mengingat :**
1. Undang-Undang Nomor 8 Tahun 1974 dan Nomor 43 Tahun 1999 tentang pokok-pokok Kepegawaian;
 2. Undang-undang Nomor 20 tahun 2003 tentang Sistem Pendidikan Nasional;
 3. Undang-Undang Nomor 5 Tahun 2015 tentang Aparatur Sipil Negara (ASN);
 4. Peraturan Pemerintah RI Nomor 17 tahun 2010 tentang Pengelolaan dan Penyelenggaraan Pendidikan sebagaimana telah dirubah dengan PP Nomor 66 Tahun 2010;
 5. Keputusan Menteri Pendidikan dan Kebudayaan Nomor 25 Tahun 2012 tentang Organisasi dan Tata Kerja Universitas Andalas;
 6. Keputusan Menteri Keuangan Nomor 501/KMK.05/2009 tentang Penetapan Universitas Andalas sebagai instansi pemerintah yang menerapkan Pengelolaan Keuangan Badan Layanan Umum;
 7. Keputusan Rektor Universitas Andalas Nomor 809/III/A/Unand-2016 tanggal 9 Agustus 2016 tentang Pengangkatan Dekan Fakultas MIPA Universitas Andalas Periode 2016 – 2020;
 8. Pengesahan DIPA Universitas Andalas Tahun 2018 Nomor SP. DIPA-2.01.2.400928/2018 tanggal 5 Desember 2017.

MEMUTUSKAN

- Menetapkan :**
- Pertama :** Menunjuk/mengangkat nama yang tersebut pada lampiran keputusan ini sebagai Panitia dan Tim Penyusun Dokumen Standar Kurikulum Sistem Penjaminan Mutu Internal (SPMI) Fakultas MIPA Universitas Andalas Tahun 2018.
- Kedua :** Panitia dan Tim Penyusun Dokumen Standar Kurikulum Sistem Penjaminan Mutu Internal (SPMI) Fakultas MIPA Universitas Andalas Tahun 2018 dalam menjalankan tugasnya bertanggung jawab kepada Dekan FMIPA Unand.
- Ketiga :** Segala biaya yang timbul akibat diterbitkannya keputusan ini dibebankan kepada anggaran DIPA Universitas Andalas Tahun 2018.
- Keempat :** Keputusan ini berlaku sejak tanggal ditetapkan, dengan ketentuan apabila dikemudian hari terdapat kekeliruan dalam penetapan ini akan diadakan perbaikan sebagaimana mestinya.

Ditetapkan di : Padang

Pada Tanggal : 27 Februari 2018



Lampiran :

1. Yang bersangkutan
2. Arsip

Lampiran I : Keputusan Dekan Fakultas MIPA Universitas Andalas

Nomor : **131** /XIII/D/FMIPA/2018

Tanggal : 27 Februari 2018

Tentang : Tim Penyusun Dokumen Standar Kurikulum Sistem Penjaminan Mutu Internal (SPMI) Fakultas MIPA Universitas Andalas Tahun 2018

NO	NAMA	JABATAN
1.	Prof. Dr. Mansyurdin, M.S.	Penanggung Jawab
2.	Dr. Harmadi	Ketua Tim Penyusun
3.	Nova Noliza Bakar, M.Si.	Tim Penyusun
4.	Dr. Suryati	Tim Penyusun
5.	Dr. Dewi Imelda Roesma	Tim Penyusun
6.	Monika Rianti Helmi, M.Si.	Tim Penyusun
7.	Dr. Maiyastri	Tim Penyusun
8.	Elistia Liza Namigo, M.Si.	Tim Penyusun
9.	Dr. Dahyunir Dahlan	Tim Penyusun
10.	Dr. Syafrizayanti	Tim Penyusun

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Lampiran II : Keputusan Dekan Fakultas MIPA Universitas Andalas

Nomor : 131 /XIII/D/FMIPA/2018

Tanggal : 27 Februari 2018

Tentang : Panitia Penyusun Dokumen Standar Kurikulum Sistem Penjaminan Mutu Internal (SPMI) Fakultas MIPA Universitas Andalas Tahun 2018

NO	NAMA	JABATAN
1.	Prof. Dr. Mansyurdin, M.S.	Penanggung Jawab
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3.	Prof. Dr. Adlis Santoni, M.S.	Wakil Ketua
4.	Dr. Tesri Maideliza	Sekretaris
5.	Joni Herman, S.E.	Anggota
6.	Dra. Zulfahmi	Anggota
7.	Sosmiadi, M.Kom.	Anggota
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