



Kampus  
Merdeka  
INDONESIA JAYA

UNESA  
PTNBH  
PENGANTARAN BANGSA

# Guideline

## CURRICULUM DEVELOPMENT, IMPLEMENTATION, AND EVALUATION

DIRECTORATE OF EDUCATIONAL  
TRANSFORMATION AND LEARNING TECHNOLOGY  
UNIVERSITAS NEGERI SURABAYA

✉ [dtptp@unesa.ac.id](mailto:dtptp@unesa.ac.id)

🌐 <https://dtptp.unesa.ac.id>

📷 [dtptpunesa](#)

# 2024



# **UNESA CURRICULUM DEVELOPMENT, IMPLEMENTATION AND EVALUATION GUIDELINES EDITION II**

**Ministry of Education, Culture, Research and  
Technology**

**Surabaya State University**

**2024**

## RECTOR'S REGULATIONS



PERATURAN REKTOR UNIVERSITAS NEGERI SURABAYA  
NOMOR 15 TAHUN 2023  
TENTANG  
KURIKULUM UNIVERSITAS NEGERI SURABAYA

DENGAN RAHMAT TUHAN YANG MAHA ESA

REKTOR UNIVERSITAS NEGERI SURABAYA,

- Menimbang : a. bahwa untuk melaksanakan ketentuan Pasal 15 Peraturan Pemerintah Nomor 37 Tahun 2022 tentang Perguruan Tinggi Negeri Badan Hukum Universitas Negeri Surabaya;
- b. bahwa berdasarkan pertimbangan sebagaimana dimaksud dalam huruf a, perlu menetapkan Peraturan Rektor Universitas Negeri Surabaya tentang Kurikulum Universitas Negeri Surabaya;
- Mengingat
1. Undang-Undang Nomor 12 Tahun 2012 tentang Pendidikan Tinggi (Lembaran Negara Republik Indonesia Tahun 2012 Nomor 158, Tambahan Lembaran Negara Republik Indonesia Nomor 5336);
  2. Peraturan Pemerintah Nomor 4 Tahun 2014 tentang Penyelenggaraan Pendidikan Tinggi dan Pengelolaan Perguruan Tinggi (Lembaran Negara Republik Indonesia Tahun 2014 Nomor 16, Tambahan Lembaran Negara Republik Indonesia Nomor 5500);
  3. Peraturan Pemerintah Nomor 37 Tahun 2022 tentang Perguruan Tinggi Negeri Badan Hukum Universitas Negeri Surabaya (Lembaran Negara Republik Indonesia Tahun 2022 Nomor 198, Tambahan Lembaran Negara Republik Indonesia Nomor 6825);

4. Peraturan Menteri Pendidikan dan Kebudayaan Nomor 3 Tahun 2020 tentang Standar Nasional Pendidikan Tinggi (Berita Negara Republik Indonesia Tahun 2020 Nomor 47);
5. Keputusan Majelis Wali Amanat Nomor 001/SK/MWA/KP/2022 tentang Pengangkatan Rektor Universitas Negeri Surabaya Periode Tahun 2022-2027;
6. Peraturan Rektor Nomor 55 Tahun 2022 tentang Pengembangan Kurikulum dan Evaluasi Kurikulum Universitas Negeri Surabaya;

**MEMUTUSKAN:**

Menetapkan : PERATURAN REKTOR UNIVERSITAS NEGERI SURABAYA  
TENTANG KURIKULUM UNIVERSITAS NEGERI SURABAYA.

**BAB I**

**KETENTUAN UMUM**

**Pasal 1**

Dalam Peraturan Rektor ini yang dimaksud dengan:

1. Universitas Negeri Surabaya, yang selanjutnya disebut UNESA merupakan perguruan tinggi negeri badan hukum.
2. Rektor adalah pemimpin UNESA yang menyelenggarakan dan mengelola UNESA.
3. Kerangka Kualifikasi Nasional Indonesia yang selanjutnya disebut KKNI adalah kerangka perjenjangan kualifikasi kompetensi yang dapat menyandingkan, menyetarakan, dan mengintegrasikan antara bidang pendidikan dan bidang pelatihan kerja serta pengalaman kerja dalam rangka pemberian pengakuan kompetensi kerja sesuai dengan struktur pekerjaan di berbagai sektor.
4. Standar adalah kriteria dasar yang harus dipenuhi dalam penyusunan semua komponen Kurikulum.



5. Kurikulum adalah seperangkat rencana dan pengaturan mengenai tujuan, isi, dan bahan pelajaran serta cara yang digunakan sebagai pedoman penyelenggaraan kegiatan pembelajaran di UNESA untuk mencapai tujuan Pendidikan Tinggi.
6. Pengembangan Kurikulum adalah proses perencanaan dan penyusunan Kurikulum oleh program studi.
7. Implementasi Kurikulum adalah pelaksanaan pembelajaran dengan mengoptimalkan peran dosen sebagai fasilitator, dengan menerapkan prinsip pembelajaran interaktif, holistik, integratif, saintifik, kontekstual, tematik, efektif, dan berpusat pada mahasiswa.
8. Evaluasi Kurikulum adalah kegiatan pengumpulan data dan informasi untuk menilai efisiensi dan efektivitas kurikulum yang meliputi dokumen kurikulum, implementasi kurikulum, hasil dan dampak kurikulum, sebagai landasan pengambilan kebijakan.
9. Capaian Pembelajaran yang selanjutnya disebut CP adalah kemampuan yang diperoleh melalui internalisasi pengetahuan, sikap, keterampilan, kompetensi, dan akumulasi pengalaman kerja.

## BAB II

### PRINSIP DAN TUJUAN PENGEMBANGAN KURIKULUM

#### Bagian Kesatu

#### Pasal 2

Prinsip pengembangan kurikulum terdiri dari:

- a. relevansi;
- b. kontinuitas;
- c. efektivitas;
- d. efisiensi dan
- e. fleksibilitas.

Bagian Kedua  
Tujuan Pengembangan Kurikulum  
Pasal 3

Tujuan pengembangan kurikulum adalah untuk memenuhi standar mutu, kebutuhan masyarakat, dan perkembangan IPTEKS, serta berorientasi ke masa depan.

BAB III  
ARAH PENGEMBANGAN DAN KEBIJAKAN KURIKULUM

Bagian Kesatu  
Arah Pengembangan Kurikulum  
Pasal 4

- (1) Pengembangan Kurikulum UNESA berorientasi pada pencapaian tujuan pendidikan nasional dengan memperhatikan tuntutan pemangku kepentingan, dinamika perkembangan IPTEKS, dan tuntutan masa depan.
- (2) Pengembangan Kurikulum UNESA diarahkan pada pembentukan kompetensi lulusan yang memiliki nilai dasar berikut:
  - a. mampu menginternalisasi nilai-nilai Pancasila;
  - b. bersikap tangguh, ilmiah, edukatif, dan religious;
  - c. mampu beradaptasi terhadap perubahan zaman dan dinamis;
  - d. menghargai perbedaan pemikiran dan keberagaman;
  - e. mampu mengintegrasikan kecakapan:
    - 1) belajar dan berinovasi;
    - 2) penguasaan informasi, media dan teknologi;
    - 3) pengembangan karir dan kecakapan hidup berbasis kewirausahaan.
  - f. menjadi pembelajar sepanjang hayat.

Bagian Kedua  
Kebijakan Pengembangan Kurikulum  
Pasal 5

- (1) Pengembangan Kurikulum mengacu pada Standar Nasional Pendidikan Tinggi (SNPT) dan Standar Pendidikan Guru (SPG).
- (2) Pengembangan Kurikulum berdasarkan capaian Rencana Strategis (Renstra) Kementerian Pendidikan, Kebudayaan, Riset dan Teknologi, Pembangunan Berkelanjutan dan/atau Renstra UNESA.
- (3) Pengembangan Kurikulum dilakukan program studi berdasarkan Evaluasi UNESA sesuai dengan ketentuan peraturan perundang-undangan yang berlaku.

BAB IV  
DASAR DAN TAHAPAN PENGEMBANGAN KURIKULUM

Bagian Kesatu  
Dasar Pengembangan Kurikulum  
Pasal 6

Pengembangan Kurikulum didasarkan pada hasil evaluasi kurikulum sebelumnya dengan mempertimbangkan hal-hal berikut:

- a. Visi dan misi Universitas Negeri Surabaya;
- b. Visi keilmuan program studi;
- c. Kebutuhan kualifikasi kerja nasional dan internasional;
- d. Kebutuhan masyarakat dan pemangku kepentingan; dan
- e. Perkembangan IPTEKS.

## Bagian Kedua

### Tahapan Pengembangan Kurikulum

#### Pasal 7

Pengembangan Kurikulum dilakukan melalui tahapan sebagai berikut:

- a. studi pendahuluan meliputi analisis kebutuhan, studi banding, *tracer study*, dan evaluasi kurikulum berjalan;
- b. perancangan kurikulum baru meliputi penetapan profil lulusan, CP, bahan kajian, mata kuliah, dan struktur kurikulum;
- c. *sanctioning* kurikulum baru;
- d. uji publik kurikulum baru; dan
- e. implementasi kurikulum baru.

#### Pasal 8

Komponen Kurikulum meliputi:

- a. identitas program studi;
- b. evaluasi kurikulum dan *tracer study*;
- c. landasan perancangan dan pengembangan kurikulum;
- d. rumusan visi, misi, tujuan, dan nilai dasar;
- e. rumusan Standar Kompetensi Lulusan (SKL);
- f. penetapan bahan kajian;
- g. pembentukan mata kuliah dan penentuan bobot;
- h. matriks dan peta kurikulum;
- i. Rencana Pembelajaran Semester (RPS);
- j. rencana implementasi hak belajar di luar prodi; dan
- k. manajemen dan mekanisme pelaksanaan kurikulum.



#### Pasal 9

- (1) Rumusan CP mencakup sikap, pengetahuan, keterampilan umum, dan keterampilan khusus.
- (2) Rumusan CP sikap dan keterampilan umum mengacu pada rumusan dalam Standar Nasional Pendidikan Tinggi (SNPT), visi, dan nilai-nilai dasar UNESA.
- (3) CP pengetahuan dan keterampilan khusus dikembangkan oleh masing-masing program studi dengan mempertimbangkan kesepakatan asosiasi/perkumpulan program studi sejenis yang mengacu pada deskripsi berdasarkan level yang ada pada dokumen KKNi dan visi keilmuan program studi.

#### Pasal 10

Tahap pengembangan kurikulum sebagaimana dimaksud dalam Pasal 7 juga berlaku pada program jalur cepat, pendidikan jarak jauh, rekognisi pembelajaran lampau, program studi di luar kampus utama, dan program lain sesuai dengan peraturan perundang-undangan yang berlaku.

### BAB V

#### IMPLEMENTASI KURIKULUM

#### Pasal 11

- (1) Implementasi Kurikulum UNESA dilaksanakan dalam bentuk perkuliahan, praktikum, pengalaman kerja, penelitian, dan pengabdian pada masyarakat.
- (2) Implementasi Kurikulum UNESA menerapkan pembelajaran interaktif holistik, integratif, saintifik, kontekstual, tematik, efektif, kolaboratif, dan berpusat pada mahasiswa.

- 8 -

#### Pasal 12

UNESA dalam satu tahun akademik menyelenggarakan perkuliahan selama 2 (dua) semester dan dapat menyelenggarakan semester antara untuk memfasilitasi percepatan penyelesaian studi mahasiswa.

#### Pasal 13

Pengembangan sikap, pengetahuan, keterampilan umum, dan keterampilan khusus diperoleh melalui kegiatan intrakurikuler, kokurikuler, dan ekstrakurikuler.

#### Pasal 14

- (1) Penyelesaian studi mahasiswa UNESA meliputi:
- tugas akhir dalam bentuk kertas kerja, spesifikasi desain atau esai seni untuk program sarjana terapan;
  - laporan tugas akhir atau skripsi untuk Program Sarjana;
  - uji kompetensi dan/atau bentuk lain untuk Program Profesi/Spesialis;
  - tesis untuk Program Magister; dan
  - disertasi untuk Program Doktor.
- (2) Penjelasan lebih lanjut ayat (1) terdapat dalam Pedoman Tugas Akhir, Skripsi, Tesis, dan Disertasi UNESA.

### BAB VI

#### EVALUASI KURIKULUM

#### Pasal 15

- Evaluasi Kurikulum mencakup penilaian terhadap input, desain, implementasi, hasil, dan dampak.
- Evaluasi Kurikulum bersifat parsial dan menyeluruh.

- (3) Evaluasi Kurikulum bersifat parsial sebagaimana dimaksud pada ayat (2) dilakukan secara berkala dan berkelanjutan sesuai kebutuhan.
- (4) Evaluasi Kurikulum bersifat menyeluruh sebagaimana dimaksud pada ayat (2) dilakukan minimal 5 (lima) tahun sekali.

## BAB VII

### PENUTUP

#### Pasal 16

Pengaturan lebih lanjut tentang kurikulum UNESA diatur dalam Pedoman Pengembangan, Implementasi, dan Evaluasi Kurikulum UNESA.

#### Pasal 17

Pada saat Undang-Undang ini mulai berlaku, Peraturan Rektor Nomor 55 Tahun 2022 tentang Pengembangan Kurikulum dan Evaluasi Kurikulum Universitas Negeri Surabaya dinyatakan masih tetap berlaku sepanjang tidak bertentangan dengan ketentuan dalam Peraturan Rektor ini.

#### Pasal 18

Peraturan Rektor ini mulai berlaku sejak tanggal ditetapkan.

Ditetapkan di Surabaya

tanggal 1 Agustus 2023

REKTOR UNIVERSITAS NEGERI  
SURABAYA,

ttd

NURHASAN

Salinan sesuai dengan aslinya.

Direktur Hukum dan Ketatalaksanaan,



SULAKSONO

## FOREWORD

Praise be to Allah Almighty so that the 2024 UNESA Curriculum Development, Implementation and Evaluation Guidelines Edition II 2024 can be completed. This guideline is an update of the UNESA Curriculum Development, Implementation and Evaluation Guide, Edition I 2023. This guideline accommodates various higher education curriculum development regulations such as Law Number 20 of 2003 concerning the National Education System, Law Number 12 of 2012 concerning Education Higher, Presidential Decree Number 8 of 2012 concerning the Indonesian National Qualifications Framework (KKNI), and Minister of Education and Culture Regulation Number 53 of 2023 concerning Quality Assurance of Higher Education. In addition, this guide also considers the Free Learning Curriculum Development Guidelines - Independent Campus, the concept of Outcome-Based Education (OBE), and the core components of Education 4.0. The preparation of these guidelines also aligns UNESA's vision and mission as a Legal Entity State University (PTNBH).

This guideline consists of 5 (five) main parts. First, the Introduction discusses the background, objectives, benefits, and the basis for curriculum development. Second, the theoretical study describes the principles of curriculum development which include relevance, flexibility, continuity, efficiency and effectiveness. Third, Curriculum Development discusses everything from content to procedures for developing study program (prodi) curricula. Fourth, Curriculum Implementation contains discussions regarding approaches, strategies, learning resources and learning media, assessment of learning processes and outcomes, and Semester Learning Plans (RPS). Fifth, Curriculum Evaluation describes the principles, approaches and models of curriculum evaluation. Finally, Governance describes the parties responsible for developing, implementing and evaluating the curriculum as well as the process of monitoring and assessing the curriculum that has been implemented.

An important aspect that each study program needs to pay attention to in developing its curriculum is the obligation to develop student character in accordance with the UNESA PTNBH vision which includes: tough, adaptive and innovative based on an entrepreneurial spirit. In addition, the study program curriculum at UNESA must accommodate the development of students' abilities including knowledge, general skills and special skills which is carried out by facilitating students to program courses across study programs, across faculties and/or across universities according to their interests and talents.



Hopefully, the 2024 Edition II of the 2024 State University of Surabaya Curriculum Development, Implementation and Evaluation Guidelines can provide benefits for all related parties. Constructive criticism and suggestions are always welcome to improve this academic manuscript in the next edition. Thank You.

Vice Chancellor for Academic, Student and Alumni Affairs  
Prof. Dr. Madlazim, M.Si.

## DRAFTING TEAM

The Team for Preparing Guidelines for Development, Implementation and Evaluation of the 2024 Edition of the 2024 State University of Surabaya Curriculum is as follows:

A. Director	<ol style="list-style-type: none"> <li>1. Prof. Dr. Nurhasan, M. Kes.</li> <li>2. Prof. Dr. Madlazim, M.Si.</li> </ol>
B. Person responsible	Prof. Dr. Fida Rachmadiarti, M. Kes.
C. Chairman	Dr. Muji Sri Prastiwi, M.Pd.
D. Secretary	Enny Susiyawati, Ph.D.
E. Member	<ol style="list-style-type: none"> <li>1. Prof. Dr. Wahono Widodo, M.Sc. (Postgraduate)</li> <li>2. Dhiah Fitrayati, S, Pd., ME (FEB)</li> <li>3. Rudianto Artiono, M.Sc. (FMIPA)</li> <li>4. Pradini Puspitaningayu, ST, MT., PhD. (FT)</li> <li>5. Dra. Ita Mardiani Zain, M. Kes. (FISIPOL)</li> <li>6. Dr. Ratna Suhartini, M.Sc. (FV)</li> <li>7. Prof. Dr. Imam Marsudi M.Si (FIKK)</li> <li>8. Dr. Fafi Inayatillah, M.Pd. (FBS)</li> <li>9. Dr. Fajar Arianto, M.Pd. (FIP)</li> <li>10. Dr. Febrita Ardianingsih, M.Si. (FK)</li> <li>11. Bayu Agung Pramono, S.Pd., M.Kes. (FIKK)</li> <li>12. Dr. Mintarsih, SS, M.Pd. (FBS)</li> <li>13. Dr. Wahyudi, S.Pd., M.Si. (Han). (FISIPOL)</li> <li>14. Prof. Dr. Any Sutiadiningsih, M.Sc. (FV)</li> <li>15. Nur Divine Anjani, S.Ked., M.Kes. (FK)</li> <li>16. Indri Fogar Susilowati, SH, MH (FH)</li> <li>17. Dr. Damajanti Kusuma Dewi, S.Psi., M.Si. (FP)</li> <li>18. Dr. Pradnyo Wijayanti, M.Pd. (PSDKU Magetan)</li> </ol>

## RECTOR'S WELCOME

The successful implementation of each program is determined, among other things, by good planning. Likewise with the educational programs implemented at UNESA. A form of planning a good educational program is providing relevant learning experiences, according to the needs of stakeholders, current developments, and being able to empower students completely (comprehensively) so that they become competitive individuals and with character. Therefore, curriculum review and development needs to always be carried out by every study program at UNESA. For this reason, updating guidelines related to the curriculum needs to be carried out so that it can be used as a basis and direction for study programs in developing, implementing and evaluating the curriculum.

UNESA as a PTNBH institution has a curriculum as a plan and arrangement regarding objectives, content and learning materials, as well as methods used as guidelines for organizing learning activities to achieve educational goals. The curriculum as a direction and development goal has dynamics in efforts to achieve the expected goals. This dynamic is a consequence of societal development which must be able to be accommodated.

Curriculum development requires a guideline as a direction and foundation so that the curriculum development, implementation and evaluation process is carried out in line with the national education system as a whole, UNESA's vision and mission, and in accordance with the demands of community life which must be accommodated. This guideline is useful as follows: 1) guidance in developing study program curricula, 2) quality assurance services in curriculum evaluation, 3) basic academic justification in the process of curriculum development, implementation and evaluation, and 4) reference in answering problems that arise in development, implementation, and evaluation of the curriculum.

Surabaya, May 2024

Chancellor of Surabaya State University

Prof. Dr. Nurhasan, M. Kes.

## LIST OF CONTENTS

PAGE .....	i
RECTOR'S REGULATIONS.....	ii
FOREWORD .....	xi
DRAFTING TEAM .....	xiii
RECTOR'S WELCOME.....	xiv
LIST OF CONTENTS .....	xv
LIST OF FIGURES .....	2
LIST OF TABLES .....	3
CHAPTER I INTRODUCTION.....	4
A. Background.....	4
B. Objectives of Curriculum Development, Implementation and Evaluation Guidelines.....	4
C. Benefits of Curriculum Development, Implementation and Evaluation Guidelines.....	5
D. Juridical Foundation .....	5
E. Definition of Terms .....	7
F. Limitation .....	9
CHAPTER II CURRICULUM CONTEXT STUDY .....	11
A. Curriculum Development Study.....	11
1. UNESA Vision, Mission and Goals .....	11
2. Study Program's Scientific Vision.....	12
3. Job Qualification Requirements .....	13
4. Community Needs .....	14
5. Development of Science, Technology and Arts (IPTEKS).....	19
B. Foundations of Curriculum Development.....	20
1. Philosophical .....	20
2. Sociological.....	21
3. Psychological .....	21
4. Historical.....	22
5. Juridical.....	22
C. Principles of Curriculum Development .....	23
1. Relevance .....	24
2. Flexibility.....	24
3. Continuity .....	24
4. Efficiency.....	24
5. Effectiveness.....	25
CHAPTER III PROGRAM CURRICULUM DEVELOPMENT .....	26
A. Study Program Curriculum Components .....	27
B. Study Program Curriculum Content.....	30
C. Learning Outcomes and Study Program Curriculum Structure .....	37
1. Academic Track .....	37
2. Professional Education .....	53
D. UNESA Curriculum Development Based on KKNi, OBE Oriented, Education 4.0, SDGs, and MBKM .....	55
E. Stages of Study Program Curriculum Development .....	57
1. Preliminary studies.....	58
2. New Curriculum Design.....	60
3. <i>Sanctioning</i> New Curriculum Through Workshops.....	61
4. Test Public/New Curriculum Publication .....	62
5. Implementation of the New Curriculum .....	62
CHAPTER IV CURRICULUM IMPLEMENTATION .....	64



A.	Forms and Methods of Learning.....	64
B.	Learning approaches .....	65
1.	Mutual Cooperation/Collaborative Approach .....	66
2.	Scientific/Scientific Approach.....	67
3.	Humanitarian/Humanistic Approach.....	68
C.	Learning Resources and Learning Media .....	69
1.	Media Selection .....	71
2.	Stages of Learning Media Development .....	72
3)	Benefits of Media in the Learning Process .....	73
D.	Assessment of Learning Processes and Outcomes .....	74
1.	Academic Assessment.....	75
2.	Nonacademic Assessment .....	82
E.	Semester Learning Plan (RPS) .....	84
1.	Understanding RPS .....	84
2.	RPS Development Principles .....	84
3.	RPS Components .....	86
4.	RPS Development Steps .....	88
5.	RPS format .....	96
CHAPTER V CURRICULUM EVALUATION.....		97
A.	Purpose of Curriculum Evaluation .....	97
B.	Curriculum Evaluation Model .....	97
C.	Types of Curriculum Evaluation.....	99
1.	Partial Curriculum Evaluation (Formative Evaluation) .....	99
2.	Comprehensive Curriculum Evaluation (Summative Evaluation) .....	99
CHAPTER VI GOVERNANCE.....		101
A.	Curriculum Implementation.....	101
1.	Role of Related Parties.....	101
2.	Coordination and Management .....	102
3.	Enforcement .....	103
B.	Curriculum Audit .....	103
1.	Principle .....	103
2.	Criteria .....	104
3.	Operationalization .....	104
CHAPTER VII CLOSING .....		105
BIBLIOGRAPHY.....		106



## LIST OF FIGURES

Figure 2.1. 21st Century Learning Framework.....	13
Figure 2.2. Seventeen Sustainable Development Goals .....	14
Figure 2.3. Core Components of Education 4.0 Higher Education .....	16
Figure 2.4. Forms of MBKM Activities .....	17
Figure 2.5. Aspects underlying UNESA Curriculum Development .....	21
Figure 2.6. Principles in UNESA Curriculum Development.....	22
Figure 3.1.UNESA Curriculum Development Guidelines Diagram .....	56
Figure 3.2.UNESA Study Program Curriculum Development Procedures.....	57
Figure 4.1. Activities in Collaborative Learning .....	66
Figure 4.2. Human Dimensions in Humanism .....	68
Figure 4.3. The Position of Assessment in Learning .....	75
Figure 4.4.Assessment Implementation Mechanism.....	79
Figure 5.1. Discrepancy Model for Evaluation of Study Program Curriculum .....	99

## LIST OF TABLES

Table 3.1. UNESA Characteristics Study Materials and Their Packaging into Courses .....	30
Table 3.2. Institutional Elective Courses .....	31
Table 3.3. Learning Achievements of S-1 and D-4 Graduates .....	37
Table 3.4. Packaging Educational and Learning Study Materials into Courses	38
Table 3.5. Basic Framework for the Bachelor of Education Curriculum.....	38
Table 3.6. Basic Framework for the Non-Educational Undergraduate Curriculum .....	40
Table 3.7. Basic Framework for the D-4 or Applied Bachelor's Curriculum .....	41
Table 3.8. Learning Achievements of Master's Graduates .....	44
Table 3.9. Basic Framework for the Master of Education Curriculum.....	45
Table 3.10. Basic Framework for the Non-Educational Masters Curriculum.....	46
Table 3.11. CPL UNESA Doctoral Level Study Program .....	48
Table 3.12. Basic Framework for the UNESA Doctoral Education Curriculum..	49
Table 3.13. Basic Framework for the UNESA Non-Educational Doctoral Program Curriculum .....	50
Table 4.1. Basic Categories of Learning Media .....	71
Table 4.2. Letter Values, Intervals and Numerical Values that apply at UNESA	80
Table 4.3. IP range and number of credits that students can take.....	80
Table 4.4. Provisions for Study Load, Study Period, and GPA for Student Graduation .....	81
Table 4.5. GPA Range and Program Graduation Predicate .....	82
Table 4.6. Study Program CPL charged to the Research Methodology Constitutional Court .....	90
Table 4.7. CPMK formulation in MK Research Methodology .....	90
Table 4.8. Formulation of Sub-CPMK in MK Research Methodology .....	91
Table 4.9. Example of Formulation of Sub-CPMK Assessment Indicators in MK Research Methodology.....	92
Table 4.10. Example of Selection of Study Materials based on the Formulation of Assessment Indicators in the Research Methodology Constitutional Court	92
Table 4.11. Example of Lecture Activity Formulation in Research Methodology MK.....	94
Table 4.12. Example of RTM in MK Research Methodology.....	95
Table 4.13. Indicators, Strategies, Forms and Examples of Assessment .....	96



## CHAPTER I INTRODUCTION

### A. Background

Based on Republic of Indonesia Government Regulation Number 37 of 2022, UNESA has transformed into PTNBH. This change in status is balanced with changes in UNESA's vision, mission and goals, so that it has an impact on the study program curriculum (Prodi). These curriculum changes were made in line with changes in UNESA's vision.

UNESA PTNBH's vision is to become a "resilient, adaptive and innovative educational university based on entrepreneurship" requires the existence of a new curriculum to achieve this vision in the field of education. For this reason, there needs to be curriculum adjustments that are in line with this vision. The UNESA PTNBH curriculum is directed at preparing a generation of lifelong, sustainable and timeless learners by utilizing digital transformation. This curriculum development is a process to answer the emerging needs and challenges that students will face in the future.

Currently, study programs around UNESA have an adaptive curriculum oriented towards KKNi, SN-DIKTI, and MBKM. In fact, several study programs have been accredited nationally and internationally. However, several curriculum adjustments according to the latest vision have not been fully accommodated in the previous guidelines. Thus new guidelines are needed.

### B. Objectives of Curriculum Development, Implementation and Evaluation Guidelines

In general, the objectives of this Curriculum Development, Implementation and Evaluation Guide are as follows:

1. serve as a guide for UNESA in internalizing higher education quality standards;
2. serve as a guide for universities, faculties and study programs in developing and implementing a curriculum based on learning outcomes that is oriented towards UNESA PTNBH policies;
3. explains the review mechanism, curriculum changes and curriculum evaluation based on learning outcomes oriented to UNESA PTNBH policy;
4. reflects UNESA's commitment to continuous quality improvement, especially in curriculum and learning in order to achieve the Vision and Mission of UNESA PTNBH.

### **C. Benefits of Curriculum Development, Implementation and Evaluation Guidelines**

Curriculum development must provide benefits for all system components involved in the institution and also for related stakeholders. Therefore, this Curriculum Development, Implementation and Evaluation Guide can provide the following benefits.

1. For students, it is an experience that must be lived out in carrying out academic and non-academic activities (self-development) to achieve their goals and realize their life hopes.
2. For lecturers, as a guide in carrying out professional duties as educators to create graduate profiles in accordance with the vision and mission.
3. For institutions, as a direction for carrying out tasks and managerial duties in accommodating institutional activities to achieve the vision and mission.
4. For society, as accountability for demands for the development of science and technology as well as accommodation for society's needs for its welfare.
5. For the nation and state, as proof of commitment to achieving national development goals.

### **D. Juridical Foundation**

These Curriculum Development, Implementation and Evaluation Guidelines are prepared based on applicable regulations and policies including:

1. Pancasila and the 1945 Constitution;
2. Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System;
3. Law of the Republic of Indonesia Number 14 of 2005 concerning Teachers and Lecturers (State Gazette of the Republic of Indonesia of 2005 Number 157, Supplement to State Gazette of the Republic of Indonesia Number 4586);
4. Law of the Republic of Indonesia Number 12 of 2012 concerning Higher Education (State Gazette of the Republic of Indonesia of 2012 Number 158, Supplement to State Gazette of the Republic of Indonesia Number 5336);
5. Republic of Indonesia government regulation no. 66 of 2010 concerning Amendments to Government Regulation Number 17 of 2010 concerning Management and Implementation of Education;
6. Republic of Indonesia Government Regulation no. 4 of 2014 concerning the Implementation of Higher Education and Management of Higher Education;
7. Republic of Indonesia Government Regulation no. 37 of 2022 concerning State

- Universities, Legal Entities, State University of Surabaya;
8. Presidential Regulation of the Republic of Indonesia Number 8 of 2012 concerning the Indonesian National Qualifications Framework (KKNI);
  9. Regulation of the Minister of Education and Culture of the Republic of Indonesia Number 73 of 2013 concerning Implementation of the KKNI in the Higher Education Sector;
  10. Regulation of the Minister of Education, Culture, Research and Technology of the Republic of Indonesia Number 6 of 2022 concerning Diplomas, Competency Certificates, Professional Certificates, Degrees and Equivalence of Higher Education Diplomas from Other Countries;
  11. Decree of the Minister of Research, Technology and Higher Education of the Republic of Indonesia No. 123 of 2019 concerning Internships and Recognition of Industrial Internship Semester Credit Units for Applied Undergraduate and Undergraduate Programs;
  12. Regulation of the Minister of Education and Culture of the Republic of Indonesia No. 7 of 2020 concerning the Establishment of Changes, Dissolution of State Universities, and the Establishment, Changes, and Revocation of Licenses for Private Universities;
  13. Regulation of the Minister of Education, Culture, Research and Technology of the Republic of Indonesia No. 13 of 2022 concerning Amendments to Regulation of the Minister of Education and Culture Number 22 of 2020 concerning the Strategic Plan of the Ministry of Education and Culture for 2020-2024;
  14. Regulation of the Minister of Education and Culture of the Republic of Indonesia No. 23 of 2015 concerning the Development of Character;
  15. Regulation of the Minister of Education, Culture, Research and Technology of the Republic of Indonesia Number 53 of 2023 concerning Quality Assurance of Higher Education;
  16. Surabaya State University Chancellor's Regulation No. 15 of 2023 concerning the Surabaya State University Curriculum;
  17. Strategic Plan of the Ministry of Education, Culture, Research and Technology 2020-2024;
  18. Surabaya State University PTNBH Strategic Plan (Renstra) 2020-2025;
  19. Surabaya State University Long Term Development Plan (RPJP) 2022-2045;
  20. Postgraduate Program Strategic Plan and Faculty Strategic Plan around UNESA.

## E. Definition of Terms

The following are the terms used in this Curriculum Development, Implementation and Evaluation Guide.

1. The curriculum is a set of plans and arrangements regarding objectives, content and learning materials as well as methods used as guidelines for implementing learning activities to achieve the goals of Higher Education.
2. Higher Education is the level of education after secondary education which includes diploma programs, bachelor's programs, master's programs, doctoral programs, and professional programs, as well as specialist programs, which are organized by universities based on Indonesian culture.
3. National Curriculum Compulsory Courses (MKWK) are courses that must be included in the Diploma or Bachelor level curriculum, including the following courses:
  - a. Religion;
  - b. Pancasila;
  - c. Citizenship; And
  - d. Indonesian.
4. Learning is the process of student interaction with lecturers and learning resources in a learning environment.
5. A Study Program (Prodi) is a unit of educational and learning activities that has a specific curriculum and learning methods in one type of academic education, professional education, and/or vocational education.
6. Graduate Profile is a characteristic or role that graduates can carry out in a particular field of expertise or work after completing their studies.
7. *Educational Program Objectives*(PEO) is a general statement that describes what graduates are expected to achieve in the years after graduating. PEO is based on needs and predictions of future capabilities.
8. Learning Outcomes are abilities obtained through internalization of knowledge, attitudes, skills, competencies and accumulated work experience.
9. Graduate Competency Standards (SKL) are a unity of attitude, skills and knowledge competencies that show student achievements from their learning outcomes at the end of the higher education program which are stated in the Graduate Learning Outcomes (CPL) formulation.
10. Study materials (subject matters) contain knowledge from certain scientific disciplines or knowledge studied by students and can be demonstrated by students.



11. Learning materials consist of knowledge (facts, concepts, principles, theories, and definitions), skills, and processes (reading, writing, counting, dancing, critical thinking, communicating, etc.), and values.
12. A course is a unit of study taught and studied by students at the tertiary level which is structured based on the CPL assigned to them, contains learning material, learning forms and methods, and assessment, and has a minimum weight of one semester credit unit (SKS).
13. The Semester Learning Plan (RPS) for a course is a learning process plan prepared for learning activities during one semester to meet the graduate learning outcomes assigned to the course. Semester learning plans or other terms, are determined and developed by lecturers independently or together in expertise groups in a field of science and/or technology in the study program.
14. Learning Assessment Standards are minimum criteria for assessing student learning processes and outcomes in order to fulfill graduate learning outcomes.
15. Learning experience is a student's learning activity through interaction with external conditions in their learning environment.
16. Form of learning is that learning activities can take the form of lectures; responses and tutorials; seminar; and practicum, studio practice, workshop practice, field practice; work practices, research, design, or development; military training, student exchange, internship, entrepreneurship, and/or other forms of community service.
17. Learning Methods are the methods used to realize learning strategies by using learning resources as optimally as possible, including learning media.
18. Assessment is one or more processes of identifying, collecting, and preparing data to evaluate the achievement of graduate learning outcomes (CPL) and curriculum objectives.
19. Learning Evaluation is one or more processes of interpreting data and evidence accumulated during the assessment process.
20. Curriculum Evaluation is a process or series of data and information collection regarding a curriculum, the results of which are then analyzed and used as a basis for improving curriculum performance to make it more optimal and effective (formative evaluation), or used as a basis for concluding and making decisions (summative evaluation) .
21. Assessment criteria are benchmarks used as a measure or reference for learning achievement in assessments based on predetermined indicators. Assessment criteria are guidelines for assessors so that assessments are

consistent and unbiased.

22. Assessment Indicators are specific and measurable statements that identify the achievement of learning outcomes or performance of student learning outcomes accompanied by evidence.
23. Data Literacy is an understanding of reading, analyzing, using data and information (big data) in the digital world.
24. Technological Literacy is an understanding of how machines work and the application of technology (coding, artificial intelligence, and engineering principles).
25. Human Literacy is an understanding of humanity and culture, communication, and design.
26. Forms of Learning Activities (BKP) MBKM are learning activities outside the study program that students can participate in for a maximum of three semesters both inside and outside their tertiary institution, which consists of 9 (nine) forms, in the form of student exchanges, teaching at school/teaching assistance, internship/work practice/industrial practice, research/research, humanitarian projects, entrepreneurial activities, independent studies/projects, village projects, and national defense.
27. The Learning Management System (LMS) is a system used to carry out the learning process by utilizing Information and Communication Technology (ICT) and is the result of systematic integration of learning components by paying attention to quality, learning resources and characteristics. learning interactions (engagement) across time and space. The important aim of the LMS is to provide access and facilities for students to build their knowledge independently and directedly, as well as providing the important role of lecturers as designers, initiators, facilitators and motivators of learning.
28. Blended learning is a learning approach that combines in a harmonious, structured and systematic manner the advantages of face-to-face and online learning.
29. Curriculum Audit is an activity intended to assess the study program curriculum as a whole.

## **F. Limitation**

This guideline regulates specific matters relating to the development, implementation and evaluation of the UNESA curriculum. For more detailed matters related to curriculum development, implementation and evaluation, refer to the

Guide to Preparing Higher Education Curriculum in the Industrial Era 4.0 to Support Independent Learning - Independent Campuses at the link <https://dikti.kemdikbud.go.id/wp-content/uploads/2020/10/BUKU-PANDUAN-PENYUSUNAN-KURIKULUM-PENDIDIK-TINGGI-MBKM.pdf> And Independent Learning Guidebook - Independent Campus at the link <https://dikti.kemdikbud.go.id/wp-content/uploads/2020/04/Buku-Panduan-Merdeka-Belajar-Kampus-Merdeka-2020>.

## CHAPTER II CURRICULUM CONTEXT STUDY

### A. Curriculum Development Study

Curriculum development is a process to answer emerging needs and challenges that will be faced in the future. Studies regarding curriculum development are needed to provide direction for the curriculum that is developed to suit community needs, applicable policies, and developments in science and technology. The study of curriculum development at UNESA can be described as follows.

#### 1. UNESA Vision, Mission and Goals

Based on the Government Regulation of the Republic of Indonesia Number 37 of 2022 concerning State Universities, Legal Entities, State University of Surabaya, UNESA's vision is to become a "tough, adaptive and innovative educational university based on entrepreneurship". The explanation of UNESA's vision is as follows:

- 1) The university is UNESA which provides academic, vocational and professional education in various disciplines based on entrepreneurship and character;
- 2) A teaching university means that UNESA is a university whose main focus is educating students to become successful individuals after graduating;
- 3) Resilient means that UNESA is able to face various challenges in accordance with developments in science and technology;
- 4) Adaptive means that UNESA has human resources and graduates who are able to adapt to various changes and developments in science and technology;
- 5) Innovative means that UNESA has human resources and graduates who have the ability to think to create new knowledge and technology.
- 6) Entrepreneurship is meant by UNESA able to develop creativity and innovation to create change by utilizing opportunities and resources to produce added value.

In line with this vision, UNESA's mission is as follows:

- 1) providing education in the educational and non-educational fields with a tough, adaptive and innovative character based on entrepreneurship;
- 2) carrying out research and improving the quality of innovation in the educational and non-educational fields based on entrepreneurship;
- 3) carry out community service and disseminate innovation in the educational and non-educational fields based on entrepreneurship for the welfare of society;
- 4) implementing the tridharma of higher education through a multicampus system in a synergistic, integrated, harmonious and sustainable manner by taking into account UNESA's excellence;
- 5) carry out effective, efficient, transparent and accountable governance that

guarantees quality on an ongoing basis; And

- 6) organize productive national and international cooperation in creating, developing and disseminating innovations in the educational and non-educational fields based on entrepreneurship.

Based on the vision and mission mentioned above, UNESA is committed to achieving the following goals:

- 1) produce human resources (HR) with character, professionalism, multiple intelligences, fighting power, high competitiveness, innovation and an entrepreneurial spirit;
- 2) produce and improve the quality of innovation in the educational and non-educational fields based on entrepreneurship;
- 3) disseminate innovation in the educational and non-educational fields based on entrepreneurship;
- 4) produce scientific works in the implementation of the tridharma of superior, quality and innovative higher education in the educational and non-educational fields based on entrepreneurship by taking into account UNESA's excellence;
- 5) realizing effective, efficient, transparent and accountable governance that guarantees sustainable quality; And
- 6) realizing productive collaboration with national institutions and international institutions in creating, developing and disseminating innovations in the educational and non-educational fields based on entrepreneurship.

Vision is the direction in the development of an institution, while mission is the task carried out to achieve that vision. Meanwhile, goals are achievements that are sought to realize the mission. Cumulative achievement of goals is an indicator of vision achievement. As an educational institution, this must be implemented in all activities carried out, both academic and non-academic. Thus, the curriculum designed and developed must aim at achieving the vision and implementing the mission.

The curriculum developed to achieve the vision, carry out the mission and achieve the goals must fully accommodate educational objectives by taking into account the characteristics of UNESA as a local learning setting. This is a background demand for curriculum development.

## **2. Study Program's Scientific Vision**

Apart from achieving the institutional vision at the university and faculty level, curriculum development at UNESA is also carried out by paying attention to the

achievement of the scientific vision that has been developed by each study program. This scientific vision is the study program's ideals in studying and developing certain knowledge that characterizes the study program's field of expertise in order to respond to the development of science and technology and its application for the benefit of society in order to improve the quality of life of the people within it, both individually and collectively. Each study program in each scientific field at UNESA has certain characteristics in accordance with the ideals, uniqueness of the institution, the development of science and technology and its application to improve the quality of life of society.

For example, the scientific vision of a Biology Education Study Program is: "Developing biology education and learning that is in line with the principles of transformative learning based on local potential and wisdom." (Independent Accreditation Institute for Education, 2022). Based on this scientific vision, this study program aspires to develop student-centered biology education and learning using transformative learning principles that are active, effective, innovative and optimize the use of technology based on existing potential and local wisdom to improve the quality of life of the community.

### **3. Job Qualification Requirements**

Curriculum development at UNESA also takes into account the demands of work qualifications mandated through Presidential Decree No. 08 of 2012 concerning the Indonesian National Qualifications Framework (KKNI). This Presidential Decree is a reference in preparing the learning outcomes of graduates from each level of education nationally. With the existence of Presidential Decree no. 08 of 2012 and Higher Education Law no. 12 of 2012 article 29 paragraphs (1), (2), and (3), the preparation of curriculum and management of higher education in each study program at UNESA will lead to the need for work qualifications based on learning outcomes.

Curriculum development according to work qualification needs will change the way of looking at a person's competence, no longer through the certificate or diploma obtained but by looking at the nationally agreed qualification framework as a basis for recognizing a person's educational results in a broad manner that is accountable and transparent. Apart from that, in Presidential Decree no. 08 of 2012 also states that this qualifications framework allows for recognition and equalization of qualifications in the KKNI with the qualifications framework of other countries or vice versa, both bilaterally and multilaterally, which is carried out on the basis of a



mutual recognition cooperation agreement which is regulated in accordance with the provisions of statutory regulations.

The process of recognizing UNESA graduates who have work qualifications equivalent to graduates from other universities abroad is carried out through an international accreditation process for each study program by accreditation institutions from other countries where one of the demands of each of these institutions is curriculum development. OBE (Outcome Based Education). In line with the needs of the KKNI, the OBE Curriculum also focuses on learning outcomes where students are expected to be able to fulfill aspects of knowledge, skills and attitudes by focusing on outcomes, not just on the material that must be completed.

#### **4. Community Needs**

The main function of the curriculum is to provide learning experiences for students' self-development so that they can successfully live their lives at that time. Therefore, the curriculum developed must be able to accommodate the demands of students' future lives. Thus, the learning and self-development experiences provided must be in accordance with future needs. This learning and self-development experience is aimed at creating superior Indonesian human resources (HR).

Society is a dynamic institution. This dynamism occurs as a result of the demands of rapidly growing society and the need for a more established life order. Curriculum development is required to be able to accommodate societal developments and issues that are developing at that time. For example, in the 21st century, issues related to human resource development include the following.

##### **a. HR skills needed in the 21st century (the 21st century skills)**

Rapid changes in the economic and technological fields occurred at the transition of the 20th century to the 21st century. Human resources tend to move significantly from one job field to another. Such job mobility creates demands for different skills. These conditions require higher education to equip students with skills that enable people to adapt flexibly to different career fields and jobs. These skills are known as 21st century skills.

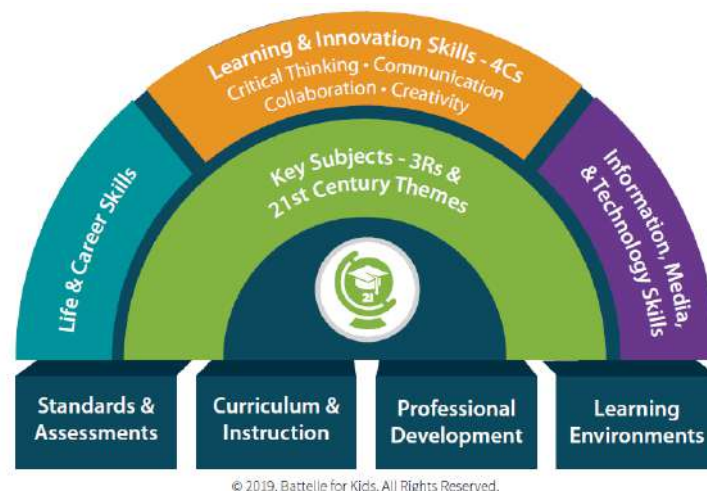
21st century skills are a combination of knowledge, skills, expertise and literacy that students must master to be successful in the world of work and everyday life. These skills are as formulated by P21 (2019) divided into four main aspects (Figure 2.1), namely:

- 1) learning and innovation skills which include critical thinking and problem solving skills (critical thinking and problem solving), communication

(communication), collaboration (collaboration), as well as creativity and innovation (creativity and innovation);

- 2) digital literacy skills which include information literacy, media literacy and information and communication technology literacy;
- 3) life skills and career skills which include flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability (productivity and accountability); and have the ability to lead and be responsible (leadership and responsibility);
- 4) 21st century themes which include global awareness, financial, economic, business and entrepreneurial literacy, civic literacy, health literacy and environmental literacy (environmental literacy).

21st century skills development for students can be carried out through learning supported by innovative systems, including: 1) standards and assessment, 2) curriculum and teaching, 3) professional development, and 4) learning environment.



**Figure 2.1.**21st Century Learning Framework(P21, 2019)

#### **b. Sustainable Development Goals(SDGs)**

*Sustainable Development Goals*(SDGs) or Sustainable Development Goals (TPB) which were declared on September 25 2015 are a form of international commitment to improving the welfare of society globally. In response to this, the Indonesian government outlined its commitments related to the TPB in Presidential Decree Number 59 of 2017 concerning Implementation of the Achievement of Sustainable Development Goals. TPB can be defined as "development that maintains a sustainable increase in the economic welfare of the community, development that maintains the sustainability of the social life of the community, development that maintains the quality of the environment and

development that guarantees justice and the implementation of governance that is able to maintain the improvement in the quality of life from one generation to the next”(Ministry of National Development Planning, 2020). In other words, TPB generally focuses on four aspects of life including economic, social, environmental and governance.

The TPB consists of 17 goals and 169 targets which are inclusive and multidimensional as targets and scope of the global development agenda until 2030. The seventeen goals in the TPB are presented in Figure 2.2.



**Figure 2.2.** Seventeen Sustainable Development Goals

Educationhigh level plays an important role in realizing the SDGs. Knowledge building, research and skills development activities carried out in higher education contribute to the implementation of the SDGs.Higher education must be able to realize Education for Sustainable Development (ESD) which is a UN program, namely education that encourages changes in knowledge, skills, values and attitudes in a fair, equitable and sustainable manner. ESD empowers the younger generation using an integrated economic, social and environmental approach that is integrated into the formal and informal curriculum or through**integration of key sustainable development issues in learning**.For example, integrating learning about climate change, disaster risk reduction, biodiversity, poverty reduction, and reducing sustainable consumption. Of course, this requires participatory learning methods that motivate and empower students to change behavior and participate in sustainable development. This kind of education promotes competencies such as critical thinking, imagining future scenarios, and making decisions collaboratively(Heleta & Bagus, 2021).

### **c. Education 4.0 (Education 4.0)**

Education 4.0 (Education 4.0) is a period when higher education applies new learning methods, innovative learning and management tools, and smart and sustainable infrastructure especially equipped with new and developing ICT to improve the processes of knowledge formation and information transfer (Miranda et al., 2021). Education 4.0 in higher education has four core components as presented in Figure 2.3 and can be described as follows.

1) Competence

The development of professional competencies for students consists of transversal competencies and competencies related to the field of study. Transversal competencies (soft skills) are general competencies that need to be developed by higher education graduates including: (1) critical thinking skills, (2) cooperation, (3) collaboration, (4) creativity and innovation. Competencies related to the field of study (hard skills) are knowledge or skills that can be applied to a particular field of study, including: (1) development of functional, technical and technological knowledge as well as performance skills needed for success in the world of work, (2) capacity to conduct investigations, designing, creating, and implementing new technology, (3) ability to propose technology-based solutions.

2) Learning methods

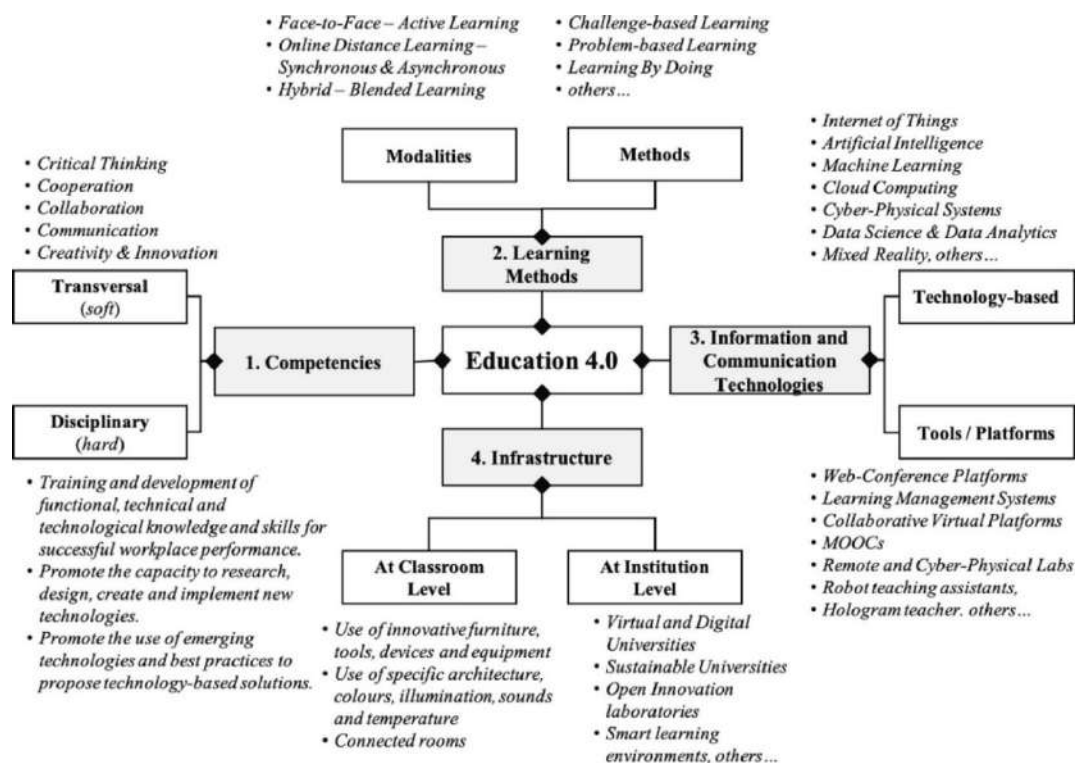
In Education 4.0, learning methods involve strategies, technology and activities that allow students to access learning appropriately and easily. Two aspects of learning methods in Education 4.0 consist of learning delivery modes and learning methods. Learning delivery modes that are often used in Education 4.0 include: (1) face-to-face learning, (2) online, and (3) blended learning. Learning methods include approaches, models, strategies or innovative methods used during the learning process in different modes, for example problem-based learning, learning-by-doing, and gamification-based learning.

3) Information and Communication Technology (ICT)

ICT components in Education 4.0 include: (1) application of technology that supports learning such as artificial intelligence and Machine Learning, data processing using Data Science, Data Analytics and Cloud Computing, as well as virtual image processing based on the Internet of Things (IoT) and (2) application of web-based digital information technology including email, blogs, wikis and online face-to-face learning platforms (for example, ZOOM, Google Meets, Webex, M-Teams) and Learning Management Systems (for example, Blackboard, CANVAS, Google Classroom, Moodle, Sakai, and Edmodo).

4) Infrastructure

The learning environment in Education 4.0 must be supported by appropriate infrastructure to accommodate student learning needs and overcome challenges related to management and learning activities. The infrastructure that needs to be provided in higher education includes two levels, namely at the class level and the institutional level. Infrastructure at the class level aims to facilitate learning activities so that they can run smoothly and comfortably, including: (1) the use of furniture and innovative learning tools, (2) the selection of certain architecture, colors, sounds and temperatures that support learning, and (3) utilization of virtual and digital sources. Infrastructure at the institutional level accommodates the implementation and management of learning within an educational institution, including: ICT platforms to support virtual classrooms, web conferencing, and LMS, as well as online services, such as online libraries, instant messaging systems, and remote laboratories.



**Figure 2.3.**Core Components of Education 4.0 Higher Education(Miranda et al., 2021)

#### d. Independent Learning-Independent Campus (MBKM)

In order to realize the autonomy and flexibility of higher education, the Ministry of Education, Culture, Research and Technology initiated the MBKM policy at the beginning of 2020. One of the programs of the MBKM policy is the Right to Study Three Semesters for Students Outside the Study Program. This



program aims to provide opportunities for students to develop competence, innovation, creativity, capacity, personality, independence, and build knowledge through direct experience in the field. The MBKM program relies on the philosophical principles of Progressivism Education which emphasizes meeting students' needs and interests through learning and building life experiences. MBKM learning activities can be carried out inside and outside the Study Program. The form of MBKM activities is presented in Figure 2.4.



**Figure 2.4.**Forms of MBKM Learning Activities

Based on the human resource development issues above, the UNESA curriculum must be able to prepare its graduates to have competencies in the form of knowledge, attitudes and skills that are able to compete in global life.

## 5. Development of Science, Technology and Arts (IPTEKS)

The continuous development of science and technology is one of the drivers for curriculum development. This development occurred as a demand for the development of human life and civilization in its time. Curriculum development must be able to accommodate issues that develop due to developments in science and technology in accordance with the times and changes. Science and Technology



issues that have an impact on the field of education and educational management developing in the 21st century are as follows.

- a. *Dual Degree/Double Degree*
- b. *Earning Credit*
- c. Distance Education (Distance learning)
  - 1) *Massive Online Courses (MOC)*
  - 2) *E-learning*
  - 3) *Blended/Hybrid learning*
  - 4) *Mobile learning*
  - 5) *Internet of Things*
- d. International/global competition and collaboration

Thus, UNESA must provide a flexible curriculum to accommodate learning needs that are in line with the demands and needs of the times as well as developments in society and science and technology.

## **B. Foundations of Curriculum Development**

Ideal curriculum development is carried out using a strong foundation, both philosophical, sociological, psychological, historical and juridical. This is to ensure that the resulting curriculum is a product of a comprehensive and systemic thinking system that accommodates all activities carried out to achieve the goals. The activities in question are not only academic activities but also non-academic activities to support the achievement of UNESA's vision and mission. The basis for curriculum development is described as follows.

### **1. Philosophical**

The philosophical foundation is an assumption or formulation obtained from the results of thinking deeply, analytically, logically and systematically in planning, implementing, coaching and developing the curriculum. The philosophical basis for curriculum development in educational institutions is a basis based on philosophy related to the meaning or nature of education. Several philosophies in curriculum development, including perennialism, essentialism, experimentalism, reconstructionism, romantic naturalism and existentialism, need to be accommodated to support the achievement of the vision and mission. UNESA curriculum development adheres to an eclectic philosophy, namely paying attention to the advantages of appropriate philosophical foundations (Akingsanya, 2014) to achieve UNESA's vision as a strong, adaptive and innovative educational university based on entrepreneurship.

## **2. Sociological**

The sociological basis directs the study of curriculum development in relation to the conditions and culture of the local community. This foundation is used because students come from the community, receive education in a community environment, and are directed towards community life as well. Changes and developments in values in society will influence the order of social life. Therefore, the curriculum must be able to respond to the challenges, demands and developments of society both locally and globally as the target users of graduates produced from the developed curriculum.

As part of the Indonesian society and nation, the UNESA curriculum was developed based on social life in Indonesia which is based on Pancasila with the practice of the values contained therein. Indonesia is also a large nation with cultural diversity, so this curriculum needs to accommodate this to strengthen national culture. The development of culture with local wisdom where UNESA grew and developed has become a distinctive feature that displays the characteristics of UNESA as part of the broad diversity of Indonesian society. Apart from that, the UNESA curriculum also takes into account the development of global society so that graduates are expected to be able to collaborate and compete at an international level.

## **3. Psychological**

The psychological basis is a basis based on the characteristic conditions of humans as individuals, which are expressed in various forms of cognitive, affective and psychomotor behavior as a result of the individual's interaction with their environment. The psychological aspects of students influence the learning process (Slavin, 2006). Considering the importance of psychological aspects, curriculum development needs to accommodate students' conditions so that learning can achieve the expected goals.

UNESA students are psychologically at the formal thinking stage, a stage of moral development which has generally reached post-conventional (Kohlberg & Gilligan, 2014), and the stage of social development that has reached adolescence with distinctive characteristics. For this reason, the UNESA curriculum being developed needs to pay attention to the stages of student psychological development. In addition, students are individuals who are in a dynamic development process according to their characteristics and level of maturity. Therefore, UNESA curriculum development needs to pay attention to the dynamics

of these developments to produce a curriculum that makes students feel comfortable and served to obtain maximum results. This can be accommodated in the form of implementing a curriculum that meets needs, namely deepening knowledge as strengthening knowledge and freedom in learning as a form of appreciation for humanization and democratization of learning.

Through heutagogy and seamless learning approaches, curriculum development at UNESA will be able to encourage students as adult learners who are independently responsible for the learning process carried out without any restrictions on subject, space and learning time through the use of digital transformation so that they are able to carry out lifelong learning. sustainably.

#### **4. Historical**

Historically, the development of the UNESA curriculum has gone in the same direction as the development of the institution which started with the BI and B-II teacher courses in the 1950s, which then developed into the Teacher Education Academy to FKIP and IKIP Surabaya. In subsequent developments, IKIP Surabaya was transformed into a university as an expansion of its mandate to develop non-educational programs in addition to the educational programs that had long been implemented. In this way, curriculum development was also carried out following this process in line with the regulations and legislation in force at that time.

The curriculum at UNESA is experiencing quite dynamic development. This development is adjusted to the needs and regulations that apply when curriculum development is carried out. For example, when a national curriculum is applied which is determined by an education consortium, the resulting curriculum has not yet led to the achievement of UNESA's vision and mission. When regulations regarding curriculum development come into effect, the curriculum begins to be organized according to the correct direction and procedures.

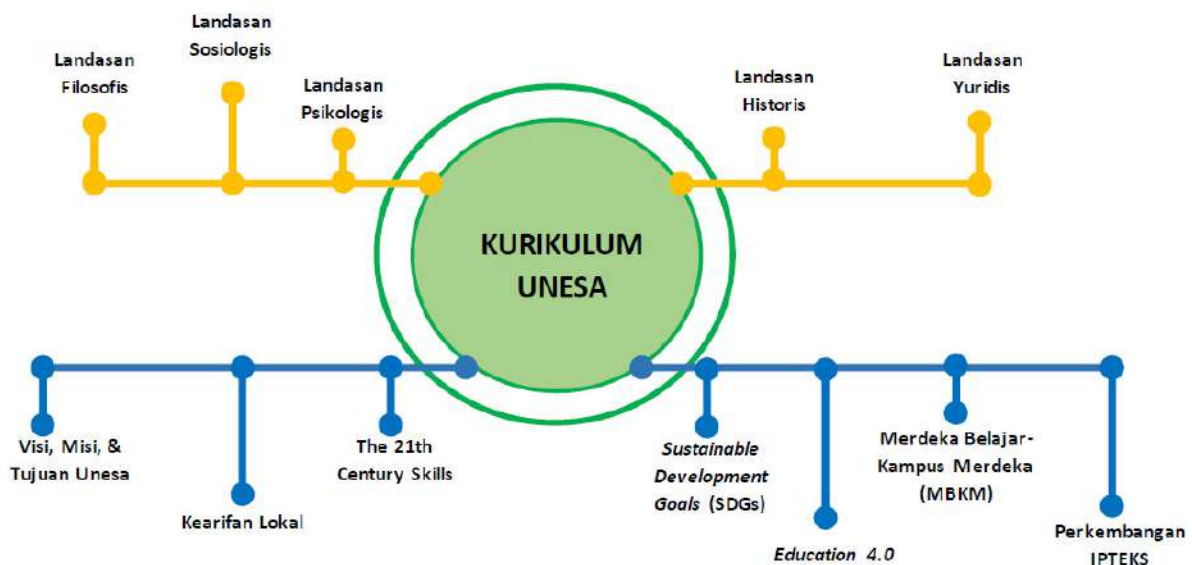
Based on this historical basis, the curriculum development process needs to pay attention to various strengths and weaknesses as well as the characteristics of curricula that have been produced and used. This needs to be used as a basis for producing a better curriculum by paying attention to applicable conditions and regulations.

#### **5. Juridical**

Curriculum development is carried out by referring to the applicable legal basis so that the resulting curriculum has the validity to be implemented. A list of

references for the legal basis in developing the UNESA curriculum is presented in Chapter I, section D.

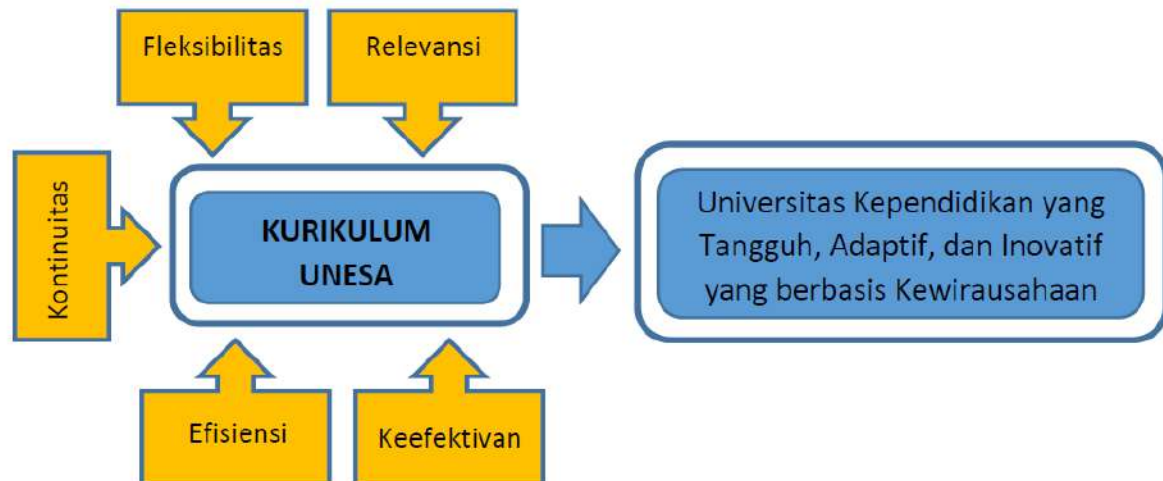
Based on the description above, the curriculum at UNESA was developed by considering aspects, including: UNESA's vision, mission and objectives, issues related to human resource development and the development of science and technology, as well as philosophical, sociological, psychological, historical and juridical foundations. Visually, curriculum development at UNESA can be presented in Figure 2.5.



**Figure 2.5.**Aspects underlying UNESA Curriculum Development

### C. Principles of Curriculum Development

A strong curriculum results from a curriculum development process that contains the principles of relevance, flexibility, sustainability, efficiency and effectiveness. Therefore, curriculum development at UNESA also follows these principles to realize UNESA's vision and mission. In general, the principles of UNESA curriculum development are presented in Figure 2.6 and described in the following paragraphs.



**Figure 2.6.** Principles in UNESA Curriculum Development

### 1. Relevance

The curriculum developed must have a link between the field of knowledge (discipline/content) and the needs of society (social needs) as users of graduates. The linkage which means that the curriculum is developed apart from meeting user/market needs is also the implementation of an in-depth study of the field of science being developed. Therefore, curriculum development takes into account the needs of society and users, as well as developments in science and technology.

### 2. Flexibility

The curriculum developed has flexibility for implementation in the field. The field in question is the implementation of the curriculum in learning or the results of the curriculum in the world of work which are implemented by graduates resulting from the curriculum. This principle of flexibility is used so that the ideal curriculum developed can be adapted to conditions in the field.

### 3. Continuity

The curriculum developed has the principle of horizontal continuity between sections of scientific disciplines. Apart from that, the curriculum developed also considers the ability to develop to a higher level. This is necessary so that the curriculum does not appear to be disconnected between sections or is a circle centered in one place.

### 4. Efficiency

The curriculum being developed needs to pay attention to efficiency aspects to obtain usability in the system as a whole. Efficiency in curriculum development is

carried out through selecting courses that suit the graduate profile, providing student workload, using time, energy, costs and other resources carefully and precisely to achieve optimal results in accordance with the objectives.

## **5. Effectiveness**

The curriculum being developed needs to take the objectives seriously in efforts to achieve them by utilizing/managing the right processes and resources to achieve optimal results in accordance with the objectives. Periodic evaluations need to be carried out to monitor the effectiveness of the curriculum that has been developed.



### **CHAPTER III PROGRAM CURRICULUM DEVELOPMENT**

UNESA provides academic, professional and vocational education in various fields of science, at levels starting from D-4, S-1, professional education, Masters and Doctoral degrees in educational and non-educational fields. The educational program is managed by the study program. The study program is tasked with designing, organizing and evaluating the curriculum so that the curriculum meets aspects of relevance and quality in order to achieve UNESA's vision. This aspect is fulfilled when the curriculum is relevant to user needs, equivalent to competency leveling based on the KKNI (RI Presidential Decree No. 8 of 2012) and National Higher Education Standards (Permendikbudristek RI No. 53 of 2023), and in accordance with the standards set at UNESA.

In order to fulfill aspects of relevance and quality, a basic framework for the study program curriculum is needed to provide direction in curriculum development so that it is in line with the vision and mission of the faculty/SPs, the vision and mission of UNESA, as well as in accordance with Indonesia's national education goals. Apart from that, the basic framework of the study program curriculum can also be used as a reference in solving problems that arise in the process of developing the study program curriculum, as well as as an effort to guarantee academic quality within UNESA. Thus, the basic framework of the study program curriculum is the signs that are established and used as guidelines in preparing the study program level curriculum.

In the UNESA context, the curriculum is a set of plans and arrangements regarding objectives, content and learning materials as well as the methods used as guidelines for implementing learning to achieve the goals of certain study programs. The study program curriculum is developed by referring to the basic framework of the study program curriculum which contains the study program's vision, mission, goals and objectives, study program learning outcomes, curriculum structure and map, and course descriptions, which are appropriate to the type and level of education.

The curriculum always changes from time to time according to developments and changing times. As time goes by, we are currently in the era of industrial revolution 4.0, society 5.0, and education 4.0, the study program curriculum must adapt to these changes and developments so that the graduates produced are relevant to society's needs. The study program curriculum that applies at UNESA has undergone changes since 2014. Gradually the study program has developed and

implemented a study program curriculum based on KKNI, SNPT, and Merdeka Belajar – Independent Campus. In addition, considering the importance of international accreditation in efforts to support internationalization, the development of the study program curriculum at UNESA needs to be accommodated through the application of the Outcome-Based Education (OBE) approach while still referring to RI Minister of Education and Culture Regulation No. 53 of 2023 concerning Quality Assurance in Higher Education.

### **A. Study Program Curriculum Components**

The curriculum that applies to each study program at UNESA is an experience design to develop students' abilities (competencies) in accordance with the competency level of graduates according to the KKNI in the study program being taken and also in accordance with the characteristics of the study program. Competence is a set of intelligent and responsible actions that a person has as a condition for being considered capable of carrying out tasks in a particular field of work. In this context, competence is a harmonious combination of mastery in a person's cognitive, affective and psychomotor domains. The competency of the student results of a study program at UNESA refers to RI Minister of Education and Culture Regulation No. 53 of 2023 concerning Quality Assurance in Higher Education, which includes the unity of attitude, knowledge and skills competencies expressed in the formulation of Graduate Learning Outcomes.

Based on the Minister of Education and Culture of the Republic of Indonesia Regulation No. 53 of 2023, the minimum study program curriculum includes graduate learning outcomes, curriculum length, learning methods, learning modalities, competency requirements and/or qualifications of prospective students, assessment of learning outcomes, learning materials that must be taken, and procedures for accepting students at various stages of the curriculum. These components are contained in the study program curriculum document which contains the following.

1. **Study Program Identity**, including: Name of University, Faculty, Study Program, Accreditation, Level of Education, and Graduate Degree.
2. **Curriculum Evaluation and Tracer Study**, explains the results of the evaluation of curriculum implementation that has been and is currently underway by presenting the mechanism and results of curriculum evaluation. The results of the tracer study are also explained as a form of needs analysis based on stakeholder needs.

3. **Foundations of Curriculum Design and Development**, explains the basis for curriculum development including philosophical, sociological, psychological, historical, juridical, and other foundations.
4. **Formulation of Vision, Mission, Goals and Basic Values**, states in full the formulation of vision, mission, goals and basic values. The vision, mission and goals of the study program are linked to the vision, mission and goals of the faculty and UNESA. The study program's scientific vision is the study program's ideals in studying and developing certain knowledge that is superior and characterizes the study program's field of expertise to respond to the development of science and technology and its application for the benefit of society in order to improve the quality of life of the people in it, both individually and collectively. The study program's scientific vision is formulated based on input from the entire study program academic community. A mission is a task that must be carried out or must be carried out to achieve a vision that has been set within a certain period of time to become a reference for preparing the main program of the study program. The main mission of the study program is the tridharma of higher education. The aim of the study program is to produce graduates as reflected in the graduate profiles that have been determined in the study program curriculum. The goal is the estuary of the mission, meaning that the goal is achieved when the mission has been carried out as it should. Basic values are something that can give meaning to all efforts and work and provide guidelines for realizing a vision. Basic values are a philosophy or belief that inspires high enthusiasm for efforts to realize a vision. The basic values that are grown and believed in at UNESA as stated in the UNESA Statutes are as follows, hereinafter known as UNESA TANGKAAS REK (TANGGuh, Collaborative, Adaptive, innovative, inclusive, lifelong learning, and Entrepreneurship-based):
  - **Tough:** Internalisation Pancasila values in everyday life and have fighting power.
  - **Collaborative:** able to work together to generate ideas or solve problems.
  - **Adaptive:** able to adapt independently and take responsibility for change through a continuous learning process.
  - **Innovative:** able to think critically and creatively in finding solutions or new ideas in solving problems according to current developments based on an entrepreneurial spirit and scientific principles.
  - **Inclusive:** supports all individuals regardless of differences, facilitates everyone's success, and respects differences of thought and diversity.

- **Lifelong learning:** have awareness of areas of strength and areas that need improvement, actively find effective ways to continue to develop and improve themselves through a continuous learning process.
  - **Entrepreneurship:** able to develop creativity and innovation to create change by utilizing opportunities and resources to produce added value.
5. **Formulation of Graduate Learning Outcomes (CPL)** or study program learning outcomes include competencies which include:
    - a. mastery of science and technology, specific skills/skills and their application to 1 (one) or a group of specific scientific fields;
    - b. general skills required as a basis for mastery of science and technology as well as relevant work fields;
    - c. knowledge and skills needed for the world of work and/or continuing studies at a higher level or to obtain a professional certificate; And
    - d. intellectual ability to think independently and critically as a lifelong learner.

The four scopes of competency are formulated by referring to the KKNI, National Education Standards (SNP), study program and professional associations and the study program's vision. This component also contains information about the Graduate Profile of the study program.
  6. **Competency requirements and/or qualifications of prospective students**, stating complete information about the competency requirements and/or qualifications of prospective students who will be accepted by the study program.
  7. **Curriculum Period**, contains information about the curriculum duration that applies to the study program.
  8. **Determination of Study Materials**, determined based on the CPL and/or Body of Knowledge of a study program which is then reduced to learning material that must be taken and packaged in the form of courses.
  9. **Formation of Courses (MK) and Determination of SKS Weights**, explains the mechanism for forming courses based on CPL (and its derivatives at MK level) and study materials, as well as determining the weight of credits.
  10. **Curriculum Matrix and Map**, describes the course organization or curriculum map in a logical and systematic structure in accordance with the study program's CPL. The distribution of courses is arranged in a series of semesters during the study period of study program graduates.
  11. **Learning methods**, contains information about the learning methods applied in learning in the study program. Further information about the learning methods applied to certain courses is contained in the semester learning plan document

(RPS).

12. **Learning Modalities**, contains information about the learning modes used in implementing learning, both online, offline and mixed modes. The technical information and timing for implementing learning modalities in certain courses are described in the semester learning plan document (RPS).
13. **Assessment of learning outcomes**, describes the types of instruments and assessment rubrics used to measure learning achievement. Detailed information about the types of instruments and assessment rubrics used in certain courses is described in the semester learning plan (RPS) document.
14. **Semester Learning Plan (RPS)**, is an outline lecture plan that will be carried out for one semester and is prepared from the results of the learning design, written in full for all courses in the study program, accompanied by other learning tools including: student assignment plans (RTM), assessment instruments in the form of rubrics and/or portfolio, and teaching materials.
15. **Plan to Implement the Right to Study Outside the Study Program**, is the implementation of the MBKM policy which is stated in the determination: 1) study outside the same study program at the PT, 2) study at the same study program outside the PT, 3) study at a different study program outside the PT, and 4) study outside the PT .
16. **Procedures for admitting students at various stages of the curriculum**, explains the procedures for accepting students through regular mechanisms, transfers and recognition of past learning, especially in terms of determining the credit load.
17. **Management and Curriculum Implementation Mechanisms**, explains the curriculum implementation plan and the Internal Quality Assurance System (SPMI) related to curriculum implementation.

## **B. Study Program Curriculum Content**

The content of the study program curriculum is packaged in the study program curriculum document. The study program curriculum is directed at forming graduate competencies that are able to integrate skills in (1) learning and innovation (learning and innovation skills), (2) mastery of information, media and technology (information, media and technology skills), and (3) career development and skills. life (life and career skills); and become lifelong learners.

Graduate competencies formulated in the study program curriculum include competencies that include: (1) mastery of science and technology, specific

skills/skills and their application to one or a group of specific scientific fields; (2) general skills required as a basis for mastering science and technology as well as relevant work fields; (3) knowledge and skills needed for the world of work and/or continuing studies at a higher level or to obtain a professional certificate; and (4) the intellectual ability to think independently and critically as a lifelong learner. The four competency scopes were formulated by the Study Program by involving stakeholders by referring to the vision and mission of higher education, KKNI, SNP, study program and professional associations, as well as the main competencies of study program graduates.

UNESA has a vision as a strong, adaptive and innovative educational university based on entrepreneurship. One of UNESA's goals related to this vision is to produce human resources with character, professionalism, multiple intelligences, fighting power, high competitiveness, innovation and an entrepreneurial spirit. The parameters of graduate excellence in competitiveness are reflected in superior English language skills. One effort to realize this excellence is the existence of English courses for all study programs at UNESA. This English course is one of UNESA's characteristic courses. To graduate from a particular study program, students must have a TEP score according to the requirements. Determination of the minimum TEP score to pass is regulated in the Academic Guidelines set by the Chancellor.

The parameters for superior character of graduates are tough, adaptive, innovative and entrepreneurial-based. Efforts to develop this character are carried out through academic and non-academic activities. Subjects that can be applied to all D-4 and S-1 study programs at UNESA to develop tough, adaptive and innovative characters are Entrepreneurship, Physical Education and Fitness, and Digital Literacy which are programmed by students as Compulsory Subjects in the Institutional Curriculum (MKWKI) . Entrepreneurship courses are intended to develop innovative character and entrepreneurial spirit in prospective UNESA graduates. Physical Education and Fitness and Digital Literacy courses are courses to develop tough, adaptive and competent character in accordance with the demands of the times. In addition, UNESA provides Recognition Institutional Elective Courses (MKPIR) as recognition courses for student competency achievements and character development. The packaging of study materials into these courses is shown in Table 3.1.

For non-academic activities, UNESA developed a system that is used to measure student participation in taking part in extracurricular student activities determined by the chancellor. This system is known as the Non-Academic



Assessment System (SIPENA) as an effort to encourage students' active participation in extracurricular activities and realize their achievements and creativity in various activities at the local, regional, national and even international levels.

**Table 3.1.** UNESA Characteristics Study Materials and Their Packaging into Courses

No	Superiority	Courses/Study Materials	Information
1.	Communicate in English	English	Stand alone as a course
2.	Resilient, adaptive and innovative	Entrepreneurship	Stand alone as MKWKI
3.	Resilient and adaptive	Physical Education and Fitness	Stand alone as MKWKI
4.	Adaptive and innovative	Digital Literacy	Stand alone as MKWKI
5.	Adaptive and collaborative	Emotional and Social Learning	Stand alone as MKPIR
6.	Resilient, adaptive and innovative	Event Management	Stand alone as MKPIR
7.	Logical, critical, creative, innovative thinking	Critical and Creative Thinking	Stand alone as MKPIR
8.	Adaptive and collaborative	Inclusive Leadership	Stand alone as MKPIR
9.	Resilient, adaptive and innovative	Empathy and Emotional Intelligence	Stand alone as MKPIR
10.	Resilient, adaptive, innovative and collaborative	Communication and Teamwork	Stand alone as MKPIR
11.	Responsibility, independence and collaboration	UNESA soft skills	Stand alone as MKPIR
12.	Resilient, adaptive and innovative	UNESA communication skills	Stand alone as MKPIR
13.	Logical, critical, creative and responsible thinking	UNESA international conference	Stand alone as MKPIR
14.	Logical, critical, creative and responsible thinking	UNESA national conference	Stand alone as MKPIR
15.	Adaptive and innovative	Inclusion	Integrated content in educational courses
16.	Adaptive and innovative	Cultural Diversity	Integrated content in study program courses

Apart from the UNESA characteristic courses, study programs can choose appropriate MKPIR as a form of recognition of the learning achievements obtained by students, especially when participating in MBKM activities. The MKPIR is not held through lectures, but is based on evidence that students have when participating in MBKM activities. An explanation of the MKPI is presented in Table 3.2.

**Table 3.2.** Institutional Elective Courses

No	Subject	Course Description	SKS	Course Learning Outcomes	Evidence for Confession
1	Emotional and Social Learning	Recognition of the learning achievements obtained by students in building self-awareness, managing emotions and motivation, better social engagement, developing good interpersonal relationship skills, and making critical and responsible decisions in facing change, adapting to the environment, adaptability, creative, and works well with others. The assessment takes the form of a portfolio assessment.	2 (0-2)	Able to apply methods to build self-awareness, manage emotions and motivation, and develop interpersonal relationship skills in real contexts.	Certificate or statement accompanied by a portfolio of activities involving activities in accordance with CP.
2	Event Management	This course functions as a form of recognition of the learning achievements obtained by students when participating in event management or committee activities on a regional, national or international scale. The assessment takes the form of a portfolio assessment.	2 (0-2) (Regional Event) 3 (0-3) (National Event) 4 (0-4) (International Event)	Able to apply skills in event management which includes planning activities, logistics organization, financing, publication, promotion, legality, documentation and organizing an event	1. Certificate of Activities as Core Committee <ul style="list-style-type: none"> <li>Chairman</li> <li>Vice Chairman</li> <li>Secretary</li> <li>Treasurer</li> </ul> 2. Activity Certificate as Supporting Committee
3	Critical and Creative Thinking	Recognition of the learning achievements obtained by students from their abilities rational and reflective thinking to make decisions, as well as the ability to use imagination, intelligence, insight and ideas in order to solve problems or realize certain ideas in a real context. The assessment takes the form of a portfolio	2(0-2)	Able to demonstrate the ability to think rationally and reflectively to make decisions, as well as the ability to use imagination, intelligence, insight and ideas in order to solve problems or realize certain ideas	Certificate or statement accompanied by a portfolio of activities in accordance with CP.

No	Subject	Course Description	SKS	Course Learning Outcomes	Evidence for Confession
		assessment.			
4	Inclusive Leadership	<p>Providing students with experience in studying theories, concepts, typologies, styles and leadership models/approaches in general, which are then linked to leadership in the field of education and educational institutions in Indonesia, including the characteristics and abilities needed for an educational leader to manage an organization or institution education. Leadership skills that students can learn are decision-making skills to influence, mobilize, develop and empower all potential educational resources. Learning is carried out using a constructivist approach and ends with an exercise in planning the management of an educational institution in group discussion and reflection activities. Assessment uses portfolio assessment.</p>	2 (0-2)	<ol style="list-style-type: none"> <li>1. Able to utilize learning resources and ICT to search for information relevant to leadership in the field of education.</li> <li>2. Have knowledge of theories, concepts, typologies, styles and leadership models/approaches in general, which are then linked to leadership in the field of education and educational institutions in Indonesia.</li> <li>3. Able to make the right decisions in overcoming problems in educational organizations by applying leadership skills to influence, mobilize, develop and empower all potential educational resources that exist through case analysis.</li> <li>4. Have an independent leadership attitude, care and be responsible for all learning tasks that have been designed both individually and in groups.</li> </ol>	<ol style="list-style-type: none"> <li>1. Certificate/charter/trophy/medal/vandal/other forms;</li> <li>2. Decree/Assignment Letter/Permit Letter;</li> <li>3. Attendance list (for regular activities);</li> <li>4. Real work and/or documentation thereof</li> </ol>
5	Empathy and Emotional Intelligence	<p>Recognition of the learning achievements obtained by students related to social and emotional skills that support positive relationships in</p>	2(0-2)	<p>Have the ability to understand other people's emotions and what other people feel and be able to create conditions (verbal or</p>	<p>Certificate or statement accompanied by a portfolio of activities in accordance with CP.</p>

No	Subject	Course Description	SKS	Course Learning Outcomes	Evidence for Confession
		<p>dealing with other people. It includes the basic and related skills of empathy and “emotional intelligence,” also known as EQ, which refers to the ability to identify and regulate our own feelings, tune into the feelings of others and understand their perspectives, and use this knowledge to:</p> <ul style="list-style-type: none"> <li>• Constructive social interactions, for more effective teamwork, problem solving, and recovery from setbacks;</li> <li>• Strengthen empathy, trust, and collaboration among teams and resolve conflict more constructively — with a particular emphasis on how socially intelligent leadership can build a culture of belonging and engagement within teams.</li> </ul> <p>Assessment uses portfolio assessment.</p>		action) that influence them in a positive way	
6	Communication and Teamwork	<p>This course functions as a form of recognition of the learning achievements that students gain from experience in public speaking and teamwork activities. Assessment uses portfolio assessment.</p>	2 (0-2)	<ul style="list-style-type: none"> <li>• Distinguish between groups and teams, including the characteristics of different types of teams</li> <li>• Develop the team and optimize the factors that contribute to team success</li> <li>• Communicate effectively within organizations, and find solutions to common barriers</li> </ul>	Certificate or statement accompanied by a portfolio of activities in accordance with CP.

No	Subject	Course Description	SKS	Course Learning Outcomes	Evidence for Confession
				<ul style="list-style-type: none"> <li>to effective communication</li> <li>Selecting effective communication channels, flows and networks within an organization based on the situation</li> <li>Identify common risks and ethical issues associated with verbal, written and social media communications</li> </ul>	
7	UNESA Softskills	This course facilitates the development of emotional, social, communication and collaboration skills in real situations. Assessment is carried out using a portfolio.	2 (0-2)	Have emotional, social, communication and collaboration skills.	Certificate or statement accompanied by a portfolio of activities in accordance with CP.
8	UNESA Communication Skills	This course examines and applies verbal and written communication skills based on communication theory and ethics and morals in real situations. Assessment uses portfolio assessment.	2 (0-2)	<ul style="list-style-type: none"> <li>Students are able to communicate orally by paying attention to communication principles based on ethics and morals</li> <li>Students are able to communicate in writing by paying attention to language rules, ethics and morals</li> </ul>	<ul style="list-style-type: none"> <li>scientific work</li> <li>seminar certificate as a speaker</li> <li>work in the form of projects</li> <li>entrepreneurship</li> <li>Certificate or statement accompanied by a portfolio of activities in accordance with CP.</li> </ul>
9	UNESA international conference	This course functions as a form of recognition of the learning achievements obtained by students when participating as speakers, both in the form of oral presentations and posters at international scientific forums. Assessment	3 (0-3)	<ul style="list-style-type: none"> <li>Students are able to develop oral and written communication skills, berpthink critically, creatively, innovatively, responsively and analytically.</li> <li>Students are able to disseminate</li> </ul>	<ul style="list-style-type: none"> <li>Seminar paper</li> <li>Certificate as a speaker</li> <li></li> </ul>

No	Subject	Course Description	SKS	Course Learning Outcomes	Evidence for Confession
		uses portfolio assessment.		their knowledge and competencies in conference/seminar activities	
10	UNESA national conference	This course functions as a form of recognition of the learning achievements obtained by students when participating as speakers, both in the form of oral presentations and posters at national scientific forums. Assessment uses portfolio assessment.	2 (0-2)	<ul style="list-style-type: none"> <li>Students are able to develop oral and written communication skills, berpikir critically, creatively, innovatively, responsively and analytically.</li> <li>Students are able to disseminate their knowledge and competencies in conference/seminar activities</li> </ul>	<ul style="list-style-type: none"> <li>Seminar paper</li> <li>Certificate as a speaker</li> </ul>

### C. Learning Outcomes and Study Program Curriculum Structure

UNESA provides education in various educational and non-educational study programs which consist of 2 pathways, namely academic and professional pathways. In the academic pathway there are levels D-4, S-1, S-2, and S-3, while the professional route is the Teacher Professional Program (PPG).

#### 1. Academic Track

##### a.

##### Level D-4 and S-1

The D-4 and S-1 levels at UNESA are held to prepare graduates who have applied undergraduate and undergraduate qualifications. The main profile of an applied bachelor (D-4) is as a technician/analyst who is ready to work in their field. The main profile of Bachelor of Education graduates is as academics/educators/educational personnel who are ready to be trained further to become teachers or professional educational personnel according to their field. The main profile of a non-educational undergraduate is as an academic or expert who is ready to be trained further to become a professional in their field. Study programs can add additional profiles based on needs analysis.

##### 1) Graduate Learning Outcomes (CPL)

Based on the Vision of Unesa, KKNI, and SNP, the learning outcomes of UNESA S-1 and D-4 graduates (CPL) are as follows.



**Table 3.3.** Learning Achievements of S-1 and D-4 Graduates

<b>CPL components</b>	<b>No.</b>	<b>CPL</b>
Determined by UNESA	1.	Able to demonstrate religious, national and cultural values, as well as academic ethics in carrying out their duties.
	2.	Demonstrate the character of being tough, collaborative, adaptive, innovative, inclusive, lifelong learning and entrepreneurial spirit.
	3.	Develop logical, critical, systematic and creative thinking in carrying out specific work in their field of expertise and in accordance with work competency standards in the field concerned.
	4.	Develop yourself continuously and collaborate.
Determined by Study Program	...	The Study Program Management Unit or Study Program was formulated referring to the main competencies of study program graduates (Article 9 of Permendikburistik Number 53 of 2023), the study program association, and the uniqueness of the UNESA Study Program.

## 2) Curriculum Structure

The basic educational study materials for UNESA's Bachelor of Education are packaged as follows.

**Table 3.4.** Packaging Educational and Learning Study Materials into Courses

<b>No</b>	<b>Study Materials</b>	<b>Subject</b>
1.	The nature and role of education in order human formation (essence, philosophy of education, foundation of education, education system)	Basics of Education
2.	Student development and learning theories that underlie learning practices	Learning Theory
3.	Curriculum and essential concepts/principles/theories subjects/guidance	School Curriculum
4.	Types, selection and development of teaching materials	Development of Teaching Materials
5.	Assessment in learning	Evaluation of Learning and Learning
6.	Designing classroom learning that is oriented towards active learning	Learning Planning
7.	Application of theoretical concepts of education and	Teaching Skills and Microlearning

No	Study Materials	Subject
	learning in artificial contexts	
8.	Application of scientific methods to solve problems in the field of education	Thesis

Curriculum structure of the UNESA Bachelor of Education Study Program following the basic framework according to Table 3.5.

**Table 3.5.** Basic Framework for the Bachelor of Education Curriculum

Subject	Number of credits	Determination Level and Description
<b>National MKWK</b>		
Religion	2	National, managed by institutions
• Islam		
• Christianity		
• Catholicism		
• Hindu religion		
• Buddhism		
• Confucianism		
Pancasila	2	National, managed by institutions
Citizenship	2	National, managed by institutions
Indonesian	2	National, managed by institutions
<b>Institutional MKWK</b>		
Physical Education and Fitness	2	Institutional, managed by institutions
Digital Literacy	2	Institutional, managed by institutions
Entrepreneurship	2	Institutional, managed by faculty/study program
English	2	Institutional, managed by faculty/study program
<b>Expertise and Scientific Subjects</b>		
Related courses with academic competence main study substance (content knowledge) according to each study program	Set Study Program	Study Program
<b>Basic Skills Courses</b>		
Research methods	3	Institutional, managed by faculty/study program
Statistics	2	Institutional, managed by faculty/study program
Basics of Education	2	Institutional, managed by faculty/study program
Learning Theory	2	Institutional, managed by faculty/study program

Subject	Number of credits	Determination Level and Description
School Curriculum (related to Field of Study)	2	Institutional, managed by faculty/study program
Learning Planning (related Field of study)	2	Institutional, managed by faculty/study program
Evaluation of Study and Learning (related to Field of Study)	2	Institutional, managed by faculty/study program
Development of Teaching Materials (related fields Studies)	2	Institutional, managed by faculty/study program
Teaching Skills and Microlearning	2	Institutional, managed by faculty/study program
<b>Creative Skills Course</b>		
PLP Program Planning	2	Institutional, managed by the institution in accordance with the CPL Study Program
PLP Program Evaluation	2	
MK Study Program/MK choice of study program/MKPIR	16	
Final Project Seminar	2	Institutional, managed by faculty/study program
Thesis	4	Institutional, managed by faculty/study program
<b>Community Life Course</b>		
Program Planning	2	MK learning activities are in the form of student exchanges, teaching at schools/teaching assistantships, internships/work practices/industrial practices, research/research, humanitarian projects, entrepreneurial activities, independent studies/projects, village projects, or national defense.
Program Evaluation	2	
MK Study Program/MK choice of study program/MKPIR	16	
		Specifically for the Student Exchange form, there is no need for MK for Program Planning and Program Evaluation

UNESA Non-Education Undergraduate Study Program curriculum structure follow the basic framework according to Table 3.6

**Table 3.6.** Basic Framework for the Non-Educational Undergraduate Curriculum

Subject			Number of credits	Determination Level and Description		
National MKWK						
Religion			2	National, institutions	managed	by
<ul style="list-style-type: none"><li>• Islam</li><li>• Christianity</li><li>• Catholicism</li><li>• Hindu religion</li><li>• Buddhism</li><li>• Confucianism</li></ul>						
Pancasila			2	National, institutions	managed	by
Citizenship			2	National, institutions	managed	by
Indonesian			2	National, institutions	managed	by
Institutional MKWK						
Physical Fitness	Education	and	2	Institutional, institutions	managed	by
Digital Literacy			2	Institutional, institutions	managed	by
Entrepreneurship			2	Institutional, faculty/study program	managed	by
English			2	Institutional, faculty/study program	managed	by
Expertise and Scientific Subjects						
Related courses with academic competence main study substance (content knowledge) according to each study program			Set Study Program	Study Program		
Basic Skills Courses						
Research methods			3	Institutional, faculty/study program	managed	by
Statistics			2	Institutional, faculty/study program	managed	by
Creative Skills Course						
Internship Program Planning			2	Institutional, managed by the institution in accordance with the CPL Study Program		
Evaluation of Internship Programs			2			
MK Study Program/MK choice of study program/MKPIR			16			
Final Project Seminar			2	Institutional, faculty/study program	managed	by

Subject	Number of credits	Determination Level and Description
Thesis	4	Institutional, managed by faculty/study program
<b>Community Life Course</b>		
Program Planning	2	This MK learning activity is in the form of student exchange, teaching at school/teaching assistantship, internship/work practice/industrial practice, research/research, humanitarian projects, entrepreneurial activities, independent studies/projects, village projects, or national defense.  Specifically for the Student Exchange form, there is no need for MK for Program Planning and Program Evaluation
Program Evaluation	2	
MK Study Program/MK choice of study program/MKPIR	16	

Based on Minister of Research and Technology Regulation Number 53 of 2023 concerning Quality Assurance of Higher Education Article 18 Paragraph 8, the policy of Internship and MBKM activities equal to 20 credits each is excluded for students in medical, midwifery and nursing study programs.

D-4 or Applied Bachelor Study Program curriculum structure follows the basic framework according to Table 3.7.

**Table 3.7.** Basic Framework for the D-4 or Applied Bachelor's Curriculum

Subject	Number of credits	Determination Level and Description
<b>National MKWK</b>		
Religion • Islam • Christianity • Catholicism • Hindu religion • Buddhism • Confucianism	2	National, managed by institutions
Pancasila	2	National, managed by institutions
Citizenship	2	National, managed by institutions
Indonesian	2	National, managed by institutions
<b>Institutional MKWK</b>		

Subject		Number of credits	Determination Level and Description
Physical Education and Fitness		2	Institutional, managed by institutions
Digital Literacy		2	Institutional, managed by institutions
Entrepreneurship		2	Institutional, managed by faculty/study program
English		2	Institutional, managed by faculty/study program
<b>Expertise and Scientific Subjects</b>			
Related courses with academic competence main study substance (content knowledge) according to each study program		Set Study Program	Study Program
<b>Basic Skills Courses</b>			
Research methods		3	Institutional, managed by faculty/study program
Statistics		2	Institutional, managed by faculty/study program
<b>Creative Skills Course</b>			
Internship Program Planning		2	Institutional, managed by the institution in accordance with the CPL Study Program
Evaluation of Internship Programs		2	
MK Study Program/MK choice of study program/MKPIR		16	
Final Project Seminar		2	Institutional, managed by faculty/study program
Thesis		4	Institutional, managed by faculty/study program
<b>Community Life Course</b>			
Program Planning		2	This MK learning activity is in the form of student exchange, teaching at school/teaching assistantship, internship/work practice/industrial practice, research/research, humanitarian projects, entrepreneurial activities, independent studies/projects, village projects, or national defense.
Program Evaluation		2	
MK Study Program/MK choice of study program/MKPIR		16	
			Specifically for the form of Student Exchange, there is no need for a MK for Program Planning and Program



Subject	Number of credits	Determination Level and Description
		Evaluation

Courses that are determined at the national and institutional level are managed by the Academic Division of the relevant university and faculty.

In general, the structure of the undergraduate curriculum consists of basic skill courses, core personality development courses, subject matter and skill courses. ), final year project courses, and social life skills courses. Skills and Science courses consist of compulsory courses and study program electives which are intended to develop competencies according to the study program with a total of credits of 35 – 54% of the entire curriculum. Ideally, the composition of study program courses consists of 85% compulsory courses and 15% elective courses. The number of credits for elective courses offered is at least 2 times the number of credits for elective courses that must be programmed by students, including including elective courses in Table 3.2. The minimum number of credits for elective courses that must be programmed is 9 credits. Meanwhile, National and Institutional MKWK is 11% with a list of courses available in Tables 3.5 and 3.6. For MBKM learning activities, study programs can provide conversion courses with credits totaling 28% of the entire curriculum, or as many as 40 credits.

Overall, the study load for UNESA applied/undergraduate (S-1) students is a minimum of 144 (fifty four) which is designed with a curriculum duration of 8 (eight) semesters. Distribution of study load in semester one and semester two is a maximum of 20 (twenty) semester credit units; then in the third semester and so on, a maximum of 24 (twenty four) semester credit units. The study load of 1 (one) credit is equivalent to 45 (forty five) hours per semester. The final assignment of undergraduate or applied undergraduate students can be in the form of a thesis, prototype, project, or other similar form of final assignment, which is determined by the respective Study Program Management Unit.

Student final assignments (Thesis, Prototype, Project, or other forms of final assignment) can be published with the following alternatives:

- 1) the final assignment report is uploaded to the UNESA Repository which has been integrated with the Kemenristekdikti Student Final Assignment Repository portal, or
- 2) articles from Final Project Reports published in scientific journals, or
- 3) articles from the results of field research, library research, and laboratory research during studies as first author published in scientific journals.

In the context of character development, apart from through academic activities which are realized in courses with a certain credit load and integrated with learning activities, students are required to take part in student activities which will be converted into certain points, and become one of the graduation requirements. Further regulations regarding this matter follow the Guidelines for Implementing the Non-Academic Assessment System which were established through a decision by the UNESA Chancellor. In addition, the learning achievements obtained by students from student organization activities can also be recognized in the form of courses. For recognition purposes, study programs can choose several course options, including: core study program MK, study program elective MK, or MKPIR.

#### **b. Master Degree Leve**

Level UNESA's Master's Degree is held to prepare graduates who have the main qualifications as masters/applied masters, with a profile as academics or experts in certain fields (according to the study program) who are tough, adaptive, innovative and responsible. Additional qualifications for UNESA Masters graduates are determined by the study program based on an analysis of the study program concerned.

##### **1) Graduate Learning Outcomes (CPL)**

Based on the KKNi, SNP, and UNESA Vision, the UNESA S-2 CPL is at least as shown in Table 3.8.

**Table 3.8.** Learning Achievements of Master's Graduates

<b>CPL components</b>	<b>No.</b>	<b>CPL</b>
Determined by UNESA	1.	Able to demonstrate religious, national and cultural values, as well as academic ethics in carrying out their duties.
	2.	Demonstrate the character of being tough, collaborative, adaptive, innovative, inclusive, lifelong learning, and entrepreneurial, as well as being professionally and ethically responsible.
	3.	Develop logical, critical, systematic and creative thinking based on scientific rules, procedures and ethics.
	4.	Develop yourself continuously, communicate and collaborate.
Determined by Study Program	...	The Study Program Management Unit or Study Program was formulated referring to the main competencies of study program graduates (Article 9 of

		Permendikburistek Number 53 of 2023), the study program association, and the uniqueness of the UNESA Study Program.
--	--	---

## 2) Curriculum Structure

The curriculum structure of the UNESA Master of Education Study Program follows the basic framework according to Table 3.9.

**Table 3.9.** Basic Framework for the Master of Education Curriculum

Subject	Study Materials	Number of credits	Determination Level and Description
Philosophy of Education (according to study program)	Study of ontology, epistemology and axiology of science in accordance with the Study Program.	2	Institutional, managed by the study program
Research methodology	Application of scientific methods to quantitative, qualitative and mixed approaches in educational fields according to the study program.  Study of the latest research results according to the field of study, including lecturers' work that is relevant to research interests.	3	Institutional, managed by the study program
Field Study/Internship	Application of management and competence to educational or training tasks or field studies.	4	Institutional, managed by the study program
Thesis	Development of knowledge, technology or art in the field of education and learning methods through thesis research, prototype, project, or other similar form of final project with an inter or multi-disciplinary approach.	7	Institutional, managed by the study program
Final Project Proposal		3	
Publication		4	
Courses related to completing the Final Assignment:			
Development of research instruments		2	
Research		2	

<b>Subject</b>	<b>Study Materials</b>	<b>Number of credits</b>	<b>Determination on Level and Description</b>
Results Seminar			
Courses related to main competencies	The main study substance (content knowledge) according to the study program concerned.  Study of the latest research results according to the field of study, including lecturers' work that is relevant to research interests.	Determined by Study Program	study program

The UNESA non-education Master's program curriculum structure follows the basic framework according to Table 3.10.

**Table 3.10.** Basic Framework for the Non-Educational Masters Curriculum

<b>Subject</b>	<b>Study Materials</b>	<b>Number of credits</b>	<b>Determination on Level and Description</b>
Philosophy of Science (according to study program)	Study of ontology, epistemology and axiology of science in accordance with the Study Program.	2	Institutional, managed by the study program
Research methodology	Application of scientific methods to quantitative, qualitative or mixed approaches in educational fields according to the study program.  Study of the latest research results according to the field of study, including lecturers' work that is relevant to research interests.	3	Institutional, managed by the study program
Field Study/ Internship	Application of management and competence to specific skill assignments or field studies.	2	Institutional, managed by the study program
Thesis	Development of knowledge, technology or art in the field of education and learning methods through thesis research, prototype, project, or other similar form of final project with an inter or multi-	7	Institutional, managed by the study program
Final Project Proposal		3	
Publication		4	

Subject	Study Materials	Number of credits	Determination Level and Description
Courses related to completing the Final Assignment:	disciplinary approach.		
Development of research instruments		2	
Research Results Seminar		2	
Courses related to main competencies	<p>The main study substance (content knowledge) according to the study program concerned.</p> <p>Study of the latest research results according to the field of study, including lecturers' work that is relevant to research interests.</p>	Determined by study program	study program

The learning load for UNESA master's/applied master's (S-2) students ranges from 54 (fifty four) credits to 72 (seventy two) credits, which is designed with a curriculum period of 3 (three) semesters to 4 (four) semesters. . The learning load is based on the definition: The study load of 1 (one) credit is equivalent to 45 (forty five) hours per semester. This additional study load is not intended to add new study substance courses, but to respect the time allocated and the results of student work in order to support students' final assignments (for example prototype development, instrument development, data collection, etc.). Students must be given a final assignment in the form of a thesis, prototype, project, or other similar form of final assignment, determined by their respective Study Program Management Unit.

Through the Publication MK, students are required to publish at least 1 (one) of the following alternatives:

- 1) Articles from the final assignment published in accredited national scientific journals (Sinta 1-4),
- 2) Articles from the final project section that are accepted for publication in international journals (indexed by Index Copernicus International (ICI), Emerging Source Citation Index (ESCI), Directory of Open Access Journal

- (DOAJ), Thomson Reuters, or Microsoft Academic Search (MAS),
- 3) Articles from research results during studies in the same field as the study program as the first author are published in accredited national scientific journals (Sinta 1-4), or
  - 4) Articles from research results during studies in the same field as the study program as the first author are accepted for publication in international journals (indexed by ICI, ESCI, DOAJ, or MAS)

The student concerned is the first author, the supervisor is the additional author. The student concerned uses Surabaya State University as an affiliate in the published article.

### c. Doctoral Level

UNESA's S-3 (doctoral/applied doctorate) level is held to prepare graduates who have the main qualifications as doctors with a profile as tough, collaborative, adaptive, innovative and responsible academics or researchers who are able to develop knowledge in certain fields that are appropriate to the study program. Additional qualifications for UNESA PhD graduates are determined by the study program based on an analysis of the study program concerned. In accordance with Level 9 of the KKNi, UNESA S-3 graduates have competencies as formulated in the study program CPL which has been formulated by the study program association or the determination of the Higher Education regarding this matter.

#### 1) Graduate Learning Outcomes (CPL)

Based on the KKNi, SNP, and UNESA Vision, the minimum CPL for UNESA doctoral level study programs is as follows.

**Table 3.11.** CPL UNESA Doctoral Level Study Program

<b>CPL components</b>	<b>No.</b>	<b>CPL</b>
Determined by Unesa	1.	Able to demonstrate religious, national and cultural values, as well as academic ethics in carrying out their duties.
	2.	Demonstrate the character of being tough, collaborative, adaptive, innovative, inclusive, entrepreneurial, and professionally and ethically responsible.
	3.	Discover or develop new theories/conceptions/ideas through logical, critical, systematic and creative thinking based on scientific rules, procedures and ethics.



CPL components	No.	CPL
	4.	Develop yourself continuously, communicate and collaborate.
Determined by Study Program	...	The Study Program Management Unit or Study Program was formulated referring to the main competencies of study program graduates (Article 9 of Permendikburistek Number 53 of 2023), the study program association, and the uniqueness of the UNESA Study Program.

## 2) Curriculum Structure

The UNESA education doctoral program curriculum structure follows the basic framework according to Table 3.12.

**Table 3.12.** Basic Framework for the UNESA Doctoral Education Curriculum

Subject	Study Materials	Number of credits	Determination Level and Description
Philosophy of Education (according to study program)	Study of ontology, epistemology and axiology of science in accordance with the Study Program.  Study of logic, rhetoric and dialectics in education in accordance with the Study Program.	3	Institutional, managed by the study program
Qualitative and Quantitative Research Methodology	Case studies of the application of scientific methods to qualitative, quantitative and mixed approaches in educational fields according to the study program.  Study of the latest research results according to the field of study, including lecturers' work that is relevant to research interests.	4	Institutional, managed by the study program
Thesis	Discovery of knowledge, technology or art in the educational field that is relevant to the study program through dissertation research, prototype, project, or other similar form of final project with an inter-multi-disciplinary or trans-disciplinary approach.	10	Institutional, managed by the study program
Final Project Proposal		5	
Research		5	

Subject	Study Materials	Number of credits	Determination Level and Description
Results Seminar			
Publication		5	
Courses related to completing the Final Assignment:			
Development of research instruments		3	
Courses related to academic competence	<p>The main study substance (content knowledge) according to the study program concerned.</p> <p>Study of the latest research results according to the field of study, including lecturers' work that is relevant to research interests.</p>	Determined by Study Program	study program

Meanwhile, the curriculum structure for non-educational PhD study programs follows the basic framework according to Table 3.13.

**Table 3.13.** Basic Framework for the UNESA Non-Educational Doctoral Program Curriculum

Subject	Study Materials	Number of credits	Determination Level and Description
Philosophy of Science (according to study program)	<p>Study of ontology, epistemology and axiology of science in accordance with the Study Program.</p> <p>Study of logic, rhetoric and dialectics in study program science.</p>	3	Institutional, managed by study programs
Qualitative and Quantitative Research Methodology	<p>Case studies of the application of scientific methods to qualitative, quantitative and mixed approaches in non-educational fields according to the study program.</p> <p>Study of the latest research results according to the field of study, including lecturers' work that is relevant to</p>	4	Institutional, managed by the study program

Subject	Study Materials	Number of credits	Determination Level and Description
	research interests.		
Thesis	Discovery of knowledge, technology, or art in fields relevant to the study program through research with an inter, multi, or trans-disciplinary approach.	10	Institutional, managed by the study program
Final Project Proposal		5	
Research Results Seminar		5	
Publication		5	
Courses related to completing the Final Assignment:			
Development of research instruments		3	
Courses related to academic competence	<p>The main study substance (content knowledge) according to the study program concerned.</p> <p>Study of the latest research results according to the field of study, including lecturers' work that is relevant to research interests.</p>	Determined by Study Program	study program

The study load for UNESA doctoral/applied doctorate (S-3) students ranges from 54 (fifty four) credits to 74 (seventy four) credits, which is designed with a Curriculum Period of 6 (six) semesters. The study load is based on the definition: the study load of 1 (one) credit is equivalent to 45 (forty five) hours per semester. This additional study load is not intended to add new study substance courses, but to respect the time allocated and the results of student work in order to support students' final assignments (for example prototype development, instrument development, data collection, etc.). The 6 semesters period consists of: 2 (two) semesters of learning that supports research and 4 (four) semesters of research. The implementation of this learning is excluded for the Research Track Doctoral Program (by research) and the Fast Track Program.

Through the Publication MK, students are required to publish at least 1 (one) of the following alternatives:

- Articles from Final Assignment Reports (Dissertation, Prototype, Project, or other forms of final assignment) published in reputable international journals (indexed by Scopus, WoS, or IEEE), or

- b) Articles from research results during studies in the same field as the study program as the first author are published in reputable international journals (indexed by Scopus, WoS, or IEEE).

The students concerned are the first author, promoter and co-promoter as additional authors. The student concerned uses Surabaya State University as an affiliate in the published article.

The doctoral study program can propose to award an honorary doctorate degree to someone who makes a contribution to the development of educational theory in a field appropriate to the study program. Further mechanisms regarding this matter are regulated by the UNESA Chancellor's Regulations.

Master's and Doctoral Study Programs are given the freedom to adapt MBKM principles in implementing their curriculum. The principles that can be adapted are as follows.

- a) The implementation of Recognition of Past Learning (RPL) for Masters and Doctoral students, especially for students who have worked or taken similar learning in the past, refers to Minister of Research, Technology and Higher Education Regulation Number 26 of 2016 concerning Recognition of Past Learning, with a mechanism determined by the Chancellor. This recognition results in equivalency of experience with certain courses or CPL.
- b) It is possible for students to take courses in other Masters/S3 Study Programs at UNESA or other HEIs, provided that: (a) the courses are relevant to the focus of their research interests, (b) the intended study program has the same or higher accreditation from the student's home study program, (c) the student's GPA is above 2.75.
- c) It is possible for students to take internship/internship/other forms of courses that include other relevant courses, with a longer internship duration.
- d) Opens the possibility of a double degree for graduates guided by applicable regulations.
- e) Opening up the possibility of Distance Learning (PJJ) by adhering to applicable regulations.

## **2. Education Profession**

Professional education programs are carried out after academic (S-1) or vocational (D-4) education programs. The S-1 program is obtained through higher education with a minimum study load of 144 credits, while the professional teacher program is obtained with a study load of 36 credits with a study period of 2-4

semesters after completing the S-1/D4 Program (Permendikbudristek RI No. 53 of 2023 concerning Guarantees Quality of Higher Education).

#### **a. Teacher Professional Education Program (PPG)**

Teacher professional education is carried out through two types of mechanisms, namely in-service PPG and pre-service PPG. In-service PPG is intended for civil servant teachers and permanent foundation teachers. Pre-service PPG is intended for prospective teachers. This curriculum development guide for PPG is general in nature and opens up opportunities to adapt it to innovative programs from the Ministry of Education and Culture. Curriculum development for PPG contains the following general provisions:

- 1) PPG programs must have a PPG curriculum
  - a) The PPG curriculum must at least contain identity, evaluation of the implementation of the previous curriculum, academic/professional vision, educational mission, objectives, graduate profile, graduate learning outcomes (CPL), field of study, list of courses/workshop subjects, Curriculum Time, requirements competencies and/or qualifications of prospective students, procedures for accepting students at various stages of the curriculum, and learning tools (RPS) which must at least include learning methods, learning modalities, assessment of learning outcomes, and learning materials that must be taken.
  - b) Apart from following the PPG CPL determination from the Ministry of Education and Culture, the PPG Study Program can add a CPL which is unique to PPG UNESA based on UNESA's vision and excellence.
  - c) There are learning stages to train reflective thinking as the basis for the performance of professional teachers which consist of: deepening the material, designing learning based on ideas for solving problems in class, reviewing design results, peer teaching, comprehensive exams, Field Experience Program (PPL).
  - d) Learning activities designed at RPS can be carried out in online, offline or mixed modes depending on the provisions of the Ministry of Education and Culture. Learning/workshops/workshops designed at RPS are interactive, holistic, integrative, scientific, contextual, thematic, effective, collaborative and student-centered.
- 2) The PPG Prajab curriculum contains a boarding education curriculum
  - a) The boarding education curriculum contains the vision and mission, goals, curriculum structure, boarding school activity program, assessment of

boarding life, mentoring and reflection, as well as regulations, violations and sanctions.

- b) Activities include periodic/routine activities and scheduled/programmed activities.

#### **b. Other Professional Education Programs**

In accordance with the demand for professional staff other than teachers in the educational sector and in the non-educational sector, UNESA can provide professional education for this purpose in accordance with the provisions of the government and the professional association that oversees the professional education. This implementation is based on the needs of stakeholders and does not conflict with applicable regulations. The curriculum developed for professional education refers to the KKNI level 7 learning achievements, as well as CPL which is unique to UNESA based on UNESA's vision and excellence.

### **D. UNESA Curriculum Development Based on KKNI, OBE Oriented, Education 4.0, SDGs, and MBKM**

In accordance with Republic of Indonesia Government Regulation no. 37 of 2022, UNESA is a PTNBH which has a mandate not only to produce educational staff, but also expert staff in various fields. Curriculum development at UNESA must be directed at being able to achieve UNESA's vision and mission as PTNBH. UNESA PTNBH's vision is to become a "resilient, adaptive and innovative educational university based on entrepreneurship". This vision must be able to be adapted in the formulation of the curriculum for study programs at UNESA.

On the other hand, Presidential Regulation Number 8 of 2012 concerning the Indonesian National Qualifications Framework (KKNI), which is also regulated in SN-DIKTI, raises demands for graduates to have certain qualifications. KKNI regulates the qualifications of abilities and skills of each graduate of an educational level from level 1 to level 9. This requires each study program at UNESA to restructure the curriculum according to this leveling. In the curriculum restructuring process, each study program must be able to formulate a graduate profile to match the level of abilities/skills based on the KKNI provided through learning experiences so that they can enter the world of work appropriately.

The importance of internationalization of higher education is also a consideration for developing the curriculum for study programs at UNESA. To support UNESA's internationalization, study program curriculum development needs to adapt to internationally applicable curricula, for example the Outcome-



Based Education (OBE) oriented curriculum. OBE is an approach in the education system with a clear focus and organizing everything in the education system so that what skills are important for students can be carried out at the end of their learning experience (Spady, 1994). The development of an OBE-oriented curriculum can be explained through the following three models which interact with each other.

1. *Outcome-Based Curriculum* (OBC), namely curriculum development based on the profile and Learning Outcomes of Graduates (CPL) or Program Learning Outcomes (PLO). Based on this CPL, study materials, curriculum maps, RPS, teaching materials, assessment instruments are prepared and developed.
2. *Outcome-Based Learning and Teaching* (OBLT), namely the implementation of learning activities including the selection of learning methods and interaction between lecturers, students and learning resources that refer to the established CPL.
3. *Outcome-Based Assessment and Evaluation* (OBAE), namely assessment and evaluation of CPL achievements in the context of improving the quality of continuous learning.

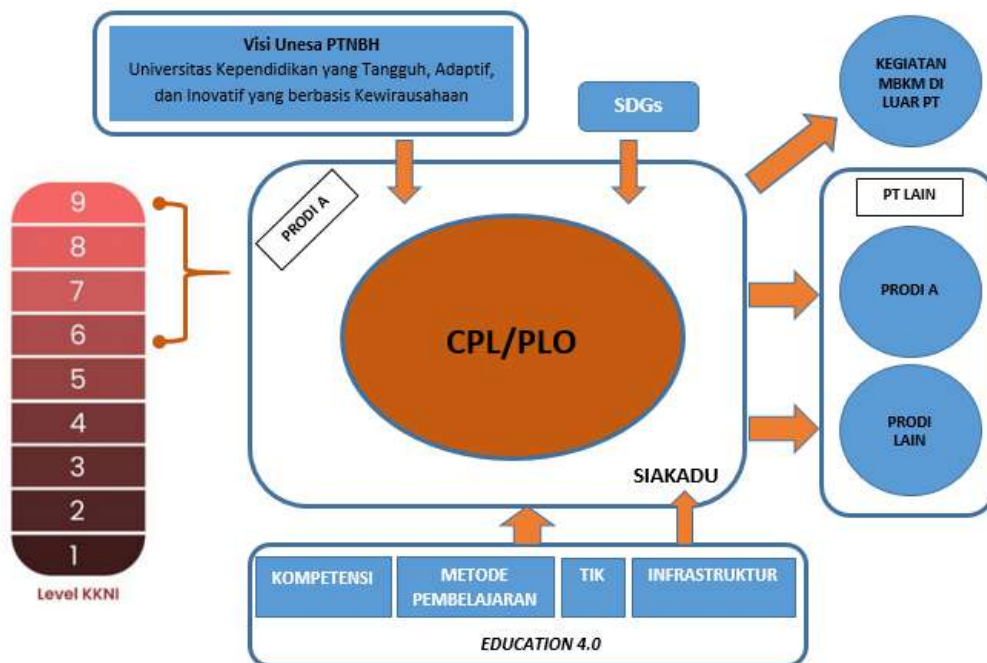
In addition to the OBE approach, curriculum development at UNESA also considers issues and demands in today's society. Some of them are Education 4.0 and SDGs (Sustainable Development Goals) or Sustainable Development Goals (TPB). These two issues are accommodated in curriculum development at UNESA to ensure that students are able to develop competencies and knowledge according to the demands of society and the world of work. Education 4.0 is a shift in education as a consequence of the industrial revolution 4.0. Miranda et al. (2021) describes the four core components of Education 4.0, including competencies, learning methods, ICT, and innovative and technology-based infrastructure (see pages 15-16). Furthermore, UNESA as a HR producer needs to consider the 17 TPB which are international commitments to improve human welfare globally. Educational, research and community service activities need to be directed to support the SDGs. Therefore, curriculum development needs to be directed at facilitating students to build knowledge, attitudes and competencies to support TPB.

The MBKM policy initiated by the Ministry of Education and Culture in 2020 also needs to be accommodated in the development of the study program curriculum at UNESA as a form of fulfilling the CPL. Through MBKM activities, students are given the opportunity to develop competence, innovation, creativity, capacity, personality, independence, and build knowledge through direct experience in the field. The right to study three semesters for students outside the study program can

be facilitated if the study program develops an appropriate curriculum.

Guidelines for curriculum development at UNESA based on the foundations described above can be briefly visualized in Figure 3.1. The Study Program Curriculum Development Guidelines at UNESA were prepared with the aim of providing guidelines for study program managers to:

1. updating existing curricula or developing new curricula for new study programs;
2. organize and monitor curriculum development carried out by the study program;
3. implementing the curriculum;
4. carry out an assessment of CPL achievement



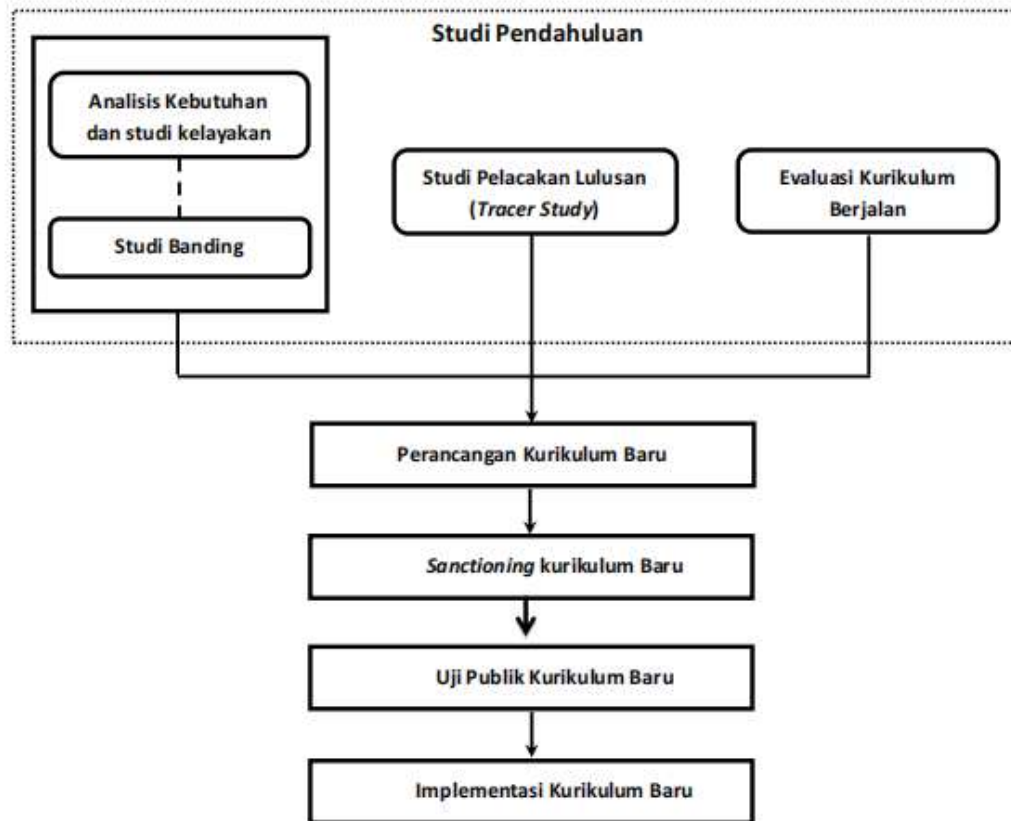
**Figure 3.1.**UNESA Curriculum Development Guidelines Diagram

### E. Stages of Study Program Curriculum Development

Curriculum development for study programs at UNESA is carried out through five series of activities, including:

1. Preliminary Study: Needs Analysis and Feasibility Study, and/or Comparative Study; Graduate Tracking Study (Tracer Study); and Evaluation of on Going Curriculum;
2. Designing a New Curriculum (Designing New Curriculum);
3. Sanctioning the New Curriculum through Workshops (Evaluation Workshop);
4. Public Test of the New Curriculum (Curriculum Publication);
5. Implementation of the New Curriculum (Implementation);

This series of activities can be illustrated as in Figure 3.2.



**Figure 3.2.**UNESA Study Program Curriculum Development Procedures

The description of each series of activities in curriculum development at UNESA can be described as follows.

### 1. Preliminary studies

Preliminary studies in curriculum development can take the form of needs analysis and feasibility studies, and/or comparative studies, graduate tracking studies, and ongoing curriculum evaluations. A summary of these activities is as follows.

#### a. Needs analysis and feasibility study

Needs analysis in curriculum development is a necessary stage in order to obtain the information needed so that the curriculum developed by the study program is truly in accordance with the needs and desires of stakeholders (students, lecturers, graduate users, and the community) and the experience of similar study programs. In addition, the same information is also analyzed to determine UNESA's level of readiness in developing new study programs or the level of readiness of study programs to restructure the curriculum. The information that must be obtained in this stage is as follows:

- 1) study program resources;

- 2) Models and Best practices of similar study programs;
- 3) Professional needs; And
- 4) Stakeholder needs and desires.

#### **b. Comparative Study (Comparative Study)**

When developing the curriculum, comparative study activities to Benchmark universities for study programs at UNESA are important to carry out. The objectives of the comparative study include the following.

- 1) Obtain information and empirical descriptions about the curriculum applied to a study program at PT Benchmark.
- 2) Obtain information and empirical descriptions about the implementation of the lecture process carried out by the study program at PT Benchmark.
- 3) Obtain information and empirical descriptions about lecture learning resources used by study programs at PT Benchmark.
- 4) Acquire information about institutional development, among others other: staff development, collaboration, alumni, and others.
- 5) Obtain information about the position of UNESA (related study program) regarding study programs at PT Benchmark.
- 6) Gain new experiences in other places (study program at PT Benchmark) thereby expanding the thinking horizons of UNESA residents in order to realize UNESA's vision and mission.

The aspects that are the focus of the comparative study include: curriculum documents, lecture and assessment processes, teaching materials, learning resources, governance, facilities and infrastructure, development of intellectual behavior, academic atmosphere, and best practices.

#### **c. Graduate Tracking Study**

One of the objectives of developing/updating the curriculum is to increase the competency of graduates in order to meet the needs of graduate users. For this reason, graduate tracking activities (tracer study) are needed which aim to:

- 1) obtain information from alumni regarding the development of competencies needed by the job market as material for curriculum improvement;
- 2) obtain information about positive things in implementing the curriculum at UNESA that need to be maintained;
- 3) obtain UNESA alumni data such as place of work, field of work, waiting time to get a job, first salary;

- 4) to obtain information from graduate users about the quality of graduates (performance, mastery, and skills that need to be improved); And
- 5) to obtain information from graduates regarding the obstacles and problems they face regarding employment, as well as job market needs. Thus, tracer studies need to be carried out on as many respondents as possible including: (a) graduates, both those who are already/not yet working, whose jobs are relevant/irrelevant to the study program competencies; (b) graduate users. Tracer studies are carried out using written or online questionnaires.

#### **d. Evaluation of the Current Curriculum**

In curriculum development, evaluation of the curriculum currently in use (on going curriculum) is needed to obtain information regarding the relevance of the current curriculum to the curriculum to be developed. The objectives of curriculum evaluation are:

- 1) obtain information about the implementation of the current curriculum which includes the implementation, practicality and effectiveness of the curriculum; And
- 2) obtain data and information related to the current curriculum for decision making regarding improvements in the quality of implementation and for future development of study program curricula at UNESA, including matters that need to be maintained, changed, improved, reduced or added, as well as conformity with developments in science and technology.

Evaluation of the current curriculum takes the form of conformity to the levels required in the KKNi, the essence of the curriculum (current school curriculum for the education curriculum at UNESA), review of learning outcomes or competencies required by the market, and evaluation of the relevance of courses to CPL according to alumni and graduate users. Evaluation was also carried out by experts in a Focus Group Discussion (FGD) which also involved stakeholders such as lecturers, students, alumni, graduate users and other stakeholders. The data and information obtained from this process are used as a basis for designing and establishing study program curricula that are in accordance with the KKNi and the demands of the times.

## **2. New Curriculum Design**

Designing a new curriculum or updating an existing curriculum needs to be

carried out through several steps/stages as follows.

- a. Self-evaluation through analysis of comparative study results, Analysis of Tracer Study Results, results of Ongoing Curriculum Evaluation and SWOT Analysis of study programs.
- b. Determining specific characteristics of study programs and determining Graduate Profiles.
- c. Determining the Competencies of study program graduates/Learning Outcomes of study programs and their qualifications.
- d. Determination of learning competencies that will be achieved through course lectures/learning outcomes.
- e. Identifying competency elements (personality foundation, mastery of knowledge and skills, ability to work, attitudes and behavior in work, understanding of the rules of social life) that exist in each learning competency.
- f. Determination of study materials (based on scientific trees) and inventory of relevant essential concepts.
- g. Determination of courses included in study materials and distribution of essential concepts.
- h. Estimation and determination of Study Load (SKS) and preparation of course descriptions.
- i. Preparation of Curriculum Maps.
- j. Preparation of Curriculum Structure.
- k. Preparation of Semester Learning Plans (RPS).

To carry out design at each stage, the study program must refer to the book [Guide to Preparing Higher Education Curriculum in the Industrial Era 4.0 to Support Independent Learning - Independent Campuses \(Kemendikbud, 2020\)](https://dikti.kemdikbud.go.id/wp-content/uploads/2020/10/BUKU-PANDUAN-PENYUSUNAN-KURIKULUM-PENDIDIK-TINGGI-MBKM.pdf) <https://dikti.kemdikbud.go.id/wp-content/uploads/2020/10/BUKU-PANDUAN-PENYUSUNAN-KURIKULUM-PENDIDIK-TINGGI-MBKM.pdf> And Independent Learning Guidebook - Independent Learning at the link <https://dikti.kemdikbud.go.id/wp-content/uploads/2020/04/Buku-Panduan-Merdeka-Belajar-Kampus-Merdeka-2020>.

### **3. Sanctioning New Curriculum Through Workshops**

Before being implemented, the new curriculum that has been developed by the study program requires input/sanctioning from many parties, including stakeholders, users and experts. The Sanctioning process in the form of workshops aims to see coherence between curriculum content. What is meant by coherence is the unity, connectedness and relevance of the curriculum content that has been



developed. Workshop participants were grouped into 2 categories, participants from within the study program and participants from external to the study program. Workshop participants are selected to represent as many user elements (students and lecturers), experts and stakeholders as possible using the criteria set by the study program.

#### **4. Test Public/New Curriculum Publication**

The new curriculum, which has gone through a sanctioning process, is then revised according to the input received after first considering its urgency. After that, the revised curriculum was tested publicly with the aim of:

- a. obtain input on the draft study program curriculum and other programs at UNESA;
- b. obtain support from all components and stakeholders of study programs and other programs at UNESA for the implementation of the developed curriculum;
- And
- c. obtain assurance that lecturers, laboratory assistants, technicians and administrative staff of study programs and other programs at UNESA can implement the curriculum.

Public testing is carried out on a limited basis involving several course lecturers to try out the syllabus and tools that have been developed in lectures/peer teaching. After that, the results of the trial observations carried out are discussed in an FGD involving the study program coordinator, supporting lecturers, students, stakeholders, and technical assistance (if needed). The results of the FGD will later be used as a basis for revising the curriculum that has been developed.

#### **5. Implementation of the New Curriculum**

After a public test has been carried out on the new curriculum that has been developed, the study program will implement the curriculum no later than the beginning of the nearest new academic year. In general, the aim of implementing the new curriculum is as an effort to achieve the vision and mission of the study program as well as the desired graduate profile. The specific objectives of implementing the new curriculum are as follows:

- a. determine the direction of study program education in accordance with developments;
- b. create a learning atmosphere or climate as expected;
- c. improving the quality of education; And
- d. produce graduates who are beneficial to society in accordance with the CPL, so

that within 3 to 5 years graduates can achieve the graduate profile set by the study program.

Next, the study program coordinator prepares a schedule for implementing the new curriculum for all new students in the study program starting in the first semester and in the following semesters. During implementation, regular observations of lectures are carried out based on the syllabus that has been developed and the results are reported at the end of the semester as material for evaluating and revising the curriculum.

## CHAPTER IV CURRICULUM IMPLEMENTATION

The curriculum is a program prepared and implemented to achieve the vision and mission which are the ideal and conceptual ideals and tasks of UNESA. Curriculum implementation requires signs that function to direct (directive), build (constructive), prevent (preventive) the occurrence of practices outside the established curriculum design, and correct things that are less appropriate (corrective). The scope of curriculum implementation guidelines outlined in this section includes: (1) learning approaches, (2) learning resources and learning media, (3) assessment of learning processes and outcomes, and (4) Semester Learning Plans.

### A. Forms and Methods of Learning

Implementation of the learning process is a process of interaction between lecturers, students, and learning resources in the learning environment. The learning process carried out through curricular activities must be carried out systematically and structured through various courses and a measurable learning load. The learning process is carried out using effective learning methods that are in accordance with the characteristics of the course in fulfilling graduate learning outcomes. Learning methods that can be used include group discussions, simulations, case studies, collaborative learning, cooperative learning, project-based learning, problem-based learning, or other learning methods, which can effectively facilitate the fulfillment of graduate learning outcomes.

Each course can use a combination of several learning methods that are accommodated in learning forms. Forms of learning can be: lectures; responses and tutorials; seminar; practicum, studio practice, workshop practice, field practice, work practice; research, design, or development; military training; student exchange; apprenticeship; businessman; and/or other forms of community service. The form of learning mentioned above is carried out through guided learning activities, structured insight; and/or independent.

Applied Bachelor (D-4), Bachelor (S-1), Professional, Masters (S-2), and Doctoral (S-3) education programs must add forms of learning in the form of research, design or development. This form of learning is learning under the guidance of lecturers in order to develop attitudes, knowledge, skills, authentic experiences, as well as improve community welfare and national competitiveness.

This form of community service learning must be given in the Applied Undergraduate (D-4), Undergraduate (S-1), Professional and Specialist programs. This form of community service learning is a student activity under the guidance of

lecturers in order to utilize science and technology to advance the welfare of society and make the nation's life more intelligent.

This form of learning can be carried out inside or outside the study program. Implementation of forms of learning outside the study program consists of:

1. learning in other study programs at the same university;
2. learning in the same study program at different universities;
3. learning in other study programs at different universities; And
4. learning at non-university institutions.

Implementation of learning in points 2, 3, and 4 is carried out based on cooperation agreements between universities or other institutions related to courses that are recognized through a credit transfer mechanism. The learning process outside the study program is an activity that can be determined by the ministry and/or Higher Education Leaders. The implementation of lectures outside this study program is under the guidance of lecturers and is intended for undergraduate and applied undergraduate study programs outside the health sector.

The minimum criteria regarding the unity of competence in attitudes, skills and knowledge are graduate competency standards that students must achieve from learning outcomes at the end of the higher education program. The development of attitudes, knowledge, general skills and special skills is obtained through intracurricular, co-curricular and extracurricular activities. Intracurricular activities are the main student activities that are programmed in the form of courses that students must take. Co-curricular activities are mandatory activities that students participate in which aim to improve students' soft skills, including Introduction to Campus Life for New Students (PKKMB), soft skills development, or other programmed activities. Extracurricular activities are activities related to developing students' talents and interests which can be participated in in student activity units on or off campus.

## **B. Learning approaches**

Based on the suitability of the characteristics of various learning approaches with the character that UNESA aspires to, student-centred learning approaches, such as mutual cooperation (collaborative), scientific (scientific) and humanitarian (humanistic) approaches are deemed appropriate for use in learning. This is also in line with the National Education Standards in Minister of Education and Culture Regulation No. 53 of 2023 (Article 14) which outlines that the learning process is carried out with create a learning atmosphere that is fun, inclusive, collaborative,

creative and effective.

## 1. Mutual Cooperation/Collaborative Approach

Collaborative learning is a learning approach that requires students to work together in groups to achieve the same goal. The collaborative approach aims to enable students to build their knowledge through dialogue, sharing information with fellow students and lecturers so that students can improve their mental abilities at a high level. In collaboration, individuals learn to listen to, understand, and respect others. Apart from that, collaborative learning also aims to improve individual abilities in resolving conflict, communicating effectively, and expanding perspectives and new ideas through interaction with other people. Through collaborative learning, individuals also learn to appreciate the roles and contributions of others and improve skills in leading and organizing groups. Collaborative learning is an important skill in the world of work and everyday social life, and is important to develop at every stage of education.

What needs to be noted in collaborative learning activities is that students work together to solve the same problem, not individually solving separate parts of the problem. Thus, during collaboration, students work together to build the same understanding and concepts, and complete each part of the problem or assignment. Therefore, collaborative learning teaches more than just cooperative activities, but also coordination activities and the organization of learning experiences because it involves cooperation in the results of discoveries and results obtained rather than just new learning. Learning with a collaborative approach can also help students build more meaningful knowledge compared to individual learning. In addition, by carrying out collaborative learning activities and projects, students will indirectly learn skills such as how to communicate. These activities are depicted simply in Figure 4.1.



**Figure 4.1.**Activities in Collaborative Learning

The lecturer's role in the collaborative approach is as a mediator. Lecturers

create convenience by arranging the physical environment, as well as learning resources and equipment that can help the learning process. Apart from that, lecturers also provide a supportive social environment, such as grouping students heterogeneously and inviting students to develop social structures that encourage appropriate behavior for collaboration between students. Lecturers also give the task of provoking interactions between students and the physical and social environment around them so that learning activities can be student-centered.

Collaborative learning can be realized in various forms. Some of them include: team-based project learning and case method. Team-based project learning can be implemented involving more than one course in one study program or different study programs. The implementation of this collaboration is regulated by each study program.

## **2. Scientific/Scientific Approach**

Learning with a scientific approach is a learning process designed in such a way that students actively construct concepts, laws or principles through the stages of observing (to identify or find problems), formulating problems, proposing or formulating hypotheses, collecting data using various techniques, analyzing data, draw conclusions and communicate “discovered” concepts, laws or principles. Student involvement in each stage makes them agents or actors of learning. The scientific approach is intended to provide students with understanding in recognizing and understanding various materials.

The formulation of understanding, concepts and theoretical understanding based on empirical facts obtained from observations involves students in constructing new learning experiences that they learn. Students do not just receive the finished formula, but experience the occurrence of the formula. In this way, students' cognitive processes are involved not only at the level of knowledge and understanding, but also at higher levels such as application, analysis, synthesis, and even evaluation. In such learning, of course all dimensions of students will be actualized. Students develop completely and fully in all their dimensions. The scientific approach referred to emphasizes the learning achievements of graduates achieved through a learning process that prioritizes a scientific approach so as to create an academic environment that is based on a system of values, norms and rules of science and upholds religious and national values.

In other words, learning with a scientific approach has the following characteristics: (1) student-centered, (2) involves scientific process skills in

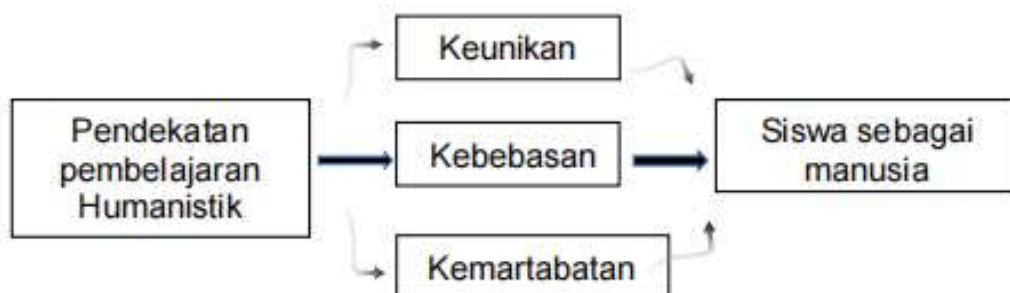


constructing concepts, laws or principles, (3) involves cognitive processes that have the potential to stimulate intellectual development, especially higher order thinking skills, and (4) can develop student character. Students actively actualize themselves in the student process according to the stages of observing, asking, exploring, associating and communicating.

The scientific approach has many variations, starting from the simplest starting with a question then ending with an answer. Some variations of scientific approaches include: Problem Based Learning, inquiry-discovery, 5E learning cycle (engage, explore, explain, elaborate, and evaluate), investigation groups, POE (Predict-Observe-Explain), PDEODE (Predict -Discuss-Explain-Observe-Discuss-Explain).

### 3. Humanitarian/Humanistic Approach

The humanistic approach is characterized by emphasis and respect for (1) uniqueness, (2) freedom, and (3) the dignity of students as human beings (Figure 4.3). Students as humans are unique, no one student is the same. This means that it is necessary to develop learning that is tolerant of students' individual uniqueness. The manifestation, for example, is that even though students are required to have the same basic competencies, they are involved in designing the content and learning outline. The second characteristic emphasized by the humanistic approach is freedom. No student in the learning process wants to be pressured and pressured by others. This means that they want to learn in a psychological condition of freedom, freedom and without pressure. Lectures by lecturers who dominate learning activities without providing opportunities for students to respond to the content of lectures and assignments without negotiating with students reduce this level of freedom. Therefore, the humanistic approach tries to offer various alternative learning activities that students can choose according to their wishes and interests.



**Figure 4.2.**Human Dimensions in Humanism

In turn, learning with a humanistic approach can lead students to achieve their dignity as human beings. With the learning they participate in, students actualize themselves as personal and social beings. As an academic community, every student is stimulated and facilitated to grow into an intellectual, scientist and academic, so that he or she will become an independent, capable, tough and responsive scholar. This is in line with the learning characteristics envisioned by the National Higher Education Standards which state that student-centred learning requires that graduates' learning outcomes be achieved through a learning process that prioritizes the development of students' creativity, capacity, personality and needs, as well as developing independence in searching and discovering knowledge.

Such learning requires lecturers who respect (appreciative) heterogeneity, and accept heterogeneity as a wealth that is continuously developed, not subverted or homogenized. For this reason, a lecturer profile is also required that has an attitude of tolerance towards the diversity of student learning outcomes. This attitude is based on the view that students' mistakes/lack of success in achieving certain competencies is an inseparable part of the learning process. In Ki Hadjar Dewantara's language, lecturers are expected to be present among students to raise enthusiasm (*ing madya mangu karsa*), but their power or abilities are hidden (*tut wuri handayani*), and indeed because of their abilities, when they have to be in front they are able to also set an example for their students. (*ing ngarsa sung tuladha*). Various MBKM activities and blended learning are manifestations of humanistic learning.

### **C. Learning Resources and Learning Media**

Learning is essentially a process of interaction between various parties, namely students and other students, students and lecturers, and students and learning resources. In this interaction, communication occurs which involves message traffic from the message source (sender) to the message recipient (receiver) through the message distributor (media). This shows the importance of learning resources and media in the learning process. These two aspects will be explained in this section.

Learning resources are everything: data, people, materials, tools, or media which can be used to obtain information/learning experiences. Learning resources can be physical or digital. Learning resources can be classified into six groups, including: (a) people: for example resource persons, lecturers, teachers, facilitators, tutors, assistants, preachers, or experts in their respective fields; (b)

message: for example information about teaching materials, folk tales, fairy tales, or sagas; (c) materials: such as audio cassettes, recordings, films, or video recordings; (d) environment: such as a lab room, school yard, pool, river, lake, or studio; (e) approaches/techniques: for example workshops, discussions, seminars, or problem solving; and (f) tools: such as computers and cameras. Learning resources can be provided by lecturers, educational institutions, or obtained independently by students themselves. Learning resources provide students with the information, knowledge, and skills necessary to acquire and master new concepts and skills. The effectiveness of learning resources depends on how well they are designed, their attractiveness, and how well they meet students' needs.

Learning media is defined as a channel for conveying messages (Bovee, 1997). AECT (2000) formulates that the substance of learning media is a form of channel used to channel messages, information or learning materials to message recipients or students. Learning media are various types of components found in the student environment that can stimulate students to learn.

Experts try to compile taxonomies and classify learning media on certain grounds. The following is a classification of media based on their physical characteristics, arranged from the most concrete to the most abstract, namely:

1. Realia: is media made from real or actual objects such as people, incidents/events, objects or certain objects.
2. Simulation: imitation of a situation that is deliberately carried out to approach/resembling an actual event or situation. For example, the behavior of a driver while driving is shown on a video screen or film screen.
3. Model: namely an imitation of the original object in three dimensions.
4. Motion picture: film or video tape from shooting/recording actual objects or events, as well as film from shooting images (animation).
5. Silent films, namely in the form of films or moving images but without sound.
6. Still portraits: portraits taken of various objects or events which may be presented through books, filmstrips, slides or magazines/newspapers.
7. Sound recording (audio recorder): namely sound recordings that use verbal language or musical sound effects (sound effects).
8. Graphic presentations: charts, graphs, maps, diagrams, paintings, posters, cartoons and caricatures.
9. Verbal presentation: print media, words projected through frame film (slides), transparencies, prints on whiteboards, magazines and sticky boards.
10. Program: also known as programmed teaching, namely a sequence of

information, whether verbal, visual or audio, which is deliberately designed to stimulate a response from students. Often this way of learning is programmed and implemented using a computer.

Based on the form and method of presentation, learning media is grouped into 6 (six) basic categories of media, namely:

**Table 4.1.** Basic Categories of Learning Media

Media Type	Media Formats
Text	Books, computer applications
Audio	CD, live presenter, podcast
Visual	Pictures, photos
Videos	DVDs, documentaries, streaming videos
Manipulative	Real or virtual objects
Person	Teacher, expert

The use of electronic media and ICT in education has grown rapidly, known as e-learning. In this innovation, all forms of educational technology are used in the teaching and learning process. This kind of learning resource is so famous that it has many synonyms such as multi-media learning, technology-enabled learning (TEL), computer-based instruction (CBI), computer-based training (CBT), internet-based training (IBT), web-based training ( WBT), online education, virtual education and so on. The difference is only in the focus of emphasis. All types of media and information presentation models are used in e-learning such as text, audio, images, animation, and so on. E-learning can occur in the classroom or outside the classroom.

Learning will be more meaningful if it takes place contextually, using real environmental context as a source of information. Dewey argued that schools are society's laboratories. To prepare students to live successfully in society, this can be done by giving students real experience, for example by bringing environmental problems into the classroom, so that students can practice solving them. In other conditions, students are invited into the environment to learn and find information in a real context. Based on this description, it is impossible to eliminate the presence of media in learning.

## 1. Media Selection

The learning outcomes to be achieved in learning are very diverse, therefore the media used to convey learning messages must also be diverse. There is no single

media that can be used equally well to convey all learning messages. Lecturers must choose media that truly suits the message to be conveyed.

There are several things that need to be considered and considered when choosing learning media, namely:

- a. Objective: The media selected should support the formulated learning objectives. For psychomotor goals that require movement skills, the best media is modeling.
- b. Appropriateness: If the material to be studied is the important parts of objects, then images such as charts and slides can be used. If what is studied are aspects related to movement, then film or video media will be more appropriate. The use of varied materials produces and enhances academic achievement.
- c. Student situation: Media will be used effectively if it does not depend on inter-individual differences between students. For example, if a student is classified as an auditive/visual type, students who are classified as auditive can learn using visual media. Students who are classified as visual can also learn using auditive media.
- d. Availability: Even though a media is considered very appropriate for achieving learning objectives, the media cannot be used if it is not available. According to Wilkinson, media is a teaching and learning tool, this equipment must be available when needed to meet the needs of students and lecturers.
- e. Efficiency: The costs incurred to obtain and use media should be truly balanced with the results to be achieved.
- f. Practicality: The media chosen must be easy to operate, not complicated, and not contain elements that endanger users. Media that is too heavy with many parts that have to be aligned will certainly take up a lot of learning time.

## 2. Stages of Learning Media Development

There are many models of learning media development. One of these media development models is the ASSURE model (Smaldino et al., 2014). The ASSURE model has six stages, including: Analyze learner (analyzing student characteristics), State standard objectives (formulating learning objectives), Select strategies, technology, media, and materials (choosing strategies, technology, media and learning materials), Utilize technology, media, and materials (using technology, media and materials in learning), Require learner participation (encouraging student involvement), and Evaluate and revise (evaluate and revise). Each of these stages is described as follows.

- a. *Analyze learner*. The first step in planning learning is identifying and analyzing

the characteristics of students involved in learning. This information will guide decision making for designing learning. The main aspects that need to be considered during the analysis of student characteristics include: (1) general characteristics, (2) specific initial competencies (knowledge, skills, and attitudes related to learning topics), and (3) learning styles.

- b. *State standard objectives.* The second step is to formulate specific learning standards and objectives according to the existing curriculum and technology standards. A good learning objective states that the student is the target, the action (behavior) that will be demonstrated, the conditions under which the behavior or performance will be observed, and the extent to which new knowledge or skills must be mastered. Conditions on objectives include the use of technology or media to support learning and assess achievement of standards or learning objectives.
- c. *Select strategies, technology, media, and materials.* After analyzing student characteristics and determining learning objectives, the next step is to determine learning strategies, technology and media, as well as appropriate materials to achieve the learning objectives that have been set.
- d. *Utilize technology, media, and materials.* This stage involves planning teaching by utilizing technology, media and materials to achieve learning objectives. The steps taken at this stage are: preview of technology, media and materials; prepare technology, media and materials; prepare the environment; prepare students; and provide learning experiences.
- e. *Require learner participation.* Effective learning requires active mental involvement of students. Therefore, at this stage students are asked to practice new knowledge and skills and receive feedback on their efforts before being formally assessed. Feedback can come from lecturers, computers, peers, or self-evaluation.
- f. *Evaluate and revise.* This stage aims to evaluate the impact of the application of technology, media and materials on achieving learning objectives and also examine the entire learning process. When there is no match between learning objectives and student learning outcomes, it is necessary to improve the learning plan.

### **3) Benefit Media in the Learning Process**

As a component of the instructional system, media has practical values in the form of abilities, including (Nuryanto, 2014):



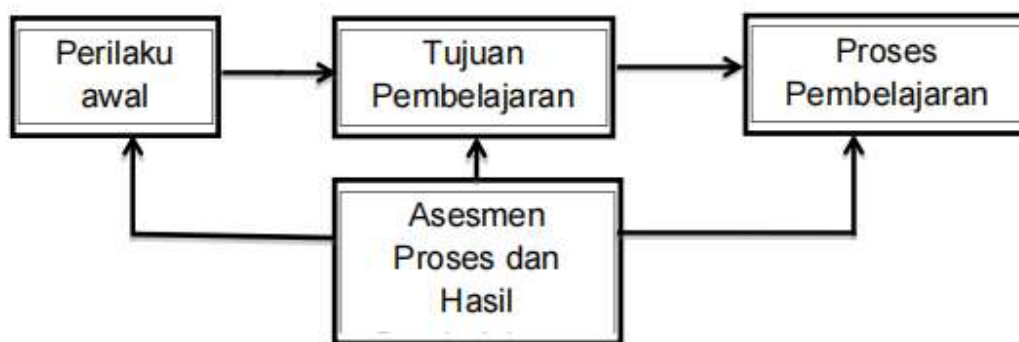
- a. concretize abstract concepts. In biology, systems in the body such as nerves cannot be seen directly, visualization with media allows students to make observations;
- b. carrying messages from objects that are dangerous and difficult, or even impossible to bring into the learning environment (wild animals, volcanic eruptions);
- c. displays objects that are too large (Borobudur Temple, Monas, even the earth and the universe);
- d. displays objects that are too small, not observable by the naked eye (viruses, bacteria, molecules, metal structures);
- e. observing movements that are too fast (a beautiful jump or a slow-moving wheel spinning), or movements that are too slow (a speeded-up flower blooming);
- f. allows students to interact directly with the environment;
- g. enable uniform observation and perception of student learning experiences;
- h. arouse student motivation;
- i. gives the impression of individual attention to study group members; And
- j. presents learning information consistently and can be repeated or stored according to needs.

#### **D. Assessment of Learning Processes and Outcomes**

As is known, assessment is the interpretation and meaning of data and information collected through the assessment process. Learning assessment is the process of collecting quantitative and qualitative data about student learning processes and outcomes. An example of an assessment process is giving a learning outcomes test followed by scoring. This score is interpreted and interpreted as an assessment. Meanwhile, learning evaluation is the process of making decisions about learning processes and outcomes based on assessment results. Evaluation is impossible without assessment. The data used as the basis for decision making must be comprehensive, complete, continuous, and collected using valid and reliable instruments, and implemented according to correct assessment principles.

Assessment of learning outcomes by lecturers and/or a team of supporting lecturers is carried out to monitor the process, learning progress and continuous improvement of student learning outcomes through coordination with the study program management unit. Assessment of learning outcomes by lecturers is carried out to monitor the process, learning progress, and improve student learning outcomes on an ongoing basis. Learning outcomes assessment has a role, among

other things, in helping students find out learning achievements. Based on the assessment of learning outcomes, information can be obtained about the weaknesses and strengths of the learning and learning that has been implemented. By knowing their weaknesses and strengths, lecturers and students have clear direction regarding what needs to be improved and done in further teaching and learning. The results of the assessment can also be used as a basis and direction for developing remediation learning or enrichment programs for students who need them, as well as improving the Semester Learning Plan (RPS) and/or the learning process at the next meeting. This is in accordance with the basic model of teaching which places assessment as one of the main components, as shown in Figure 4.3.



**Figure 4.3.**The Position of Assessment in Learning

Based on this, each UNESA lecturer is tasked with (a) developing valid assessment instruments in accordance with the final competencies/indicators/abilities to be measured; and (b) carry out the assessment process seriously in accordance with the assessment principles. UNESA has two assessment standards, namely: Academic Assessment and Non-Academic Assessment, each of which is described as follows.

## 1. Academic Assessment

### a. Assessment Principles and Objectives

Academic assessment includes student learning processes and outcomes which are carried out using principles in accordance with SNP (Assessment Standards), namely valid, reliable, transparent, accountable, fair, objective and educative. Each of these principles is described as follows.

- 1) The valid principle indicates that the assessment is carried out based on data that reflects the abilities being measured. For this reason, a valid assessment instrument is also needed.
- 2) The reliable principle shows that the assessment is able to show consistent

and trustworthy results.

- 3) The principle of transparency indicates that assessment procedures and results can be accessed by all stakeholders.
- 4) The principle of accountability shows that assessments are carried out in accordance with clear procedures and criteria, agreed upon at the start of the lecture, and understood by students.
- 5) The principle of fairness indicates that differences in assessment results are caused by differences in student learning achievements in the competencies being assessed, not because of differences in religious, ethnic, cultural, customs, socio-economic status and gender backgrounds.
- 6) The objective principle shows that assessment is based on standards agreed between lecturers and students and is free from the influence of the subjectivity of the assessor and those being assessed.
- 7) The educational principle shows that assessment results can motivate students to be able to improve their planning and learning methods and achieve graduate learning outcomes.

The targets of academic assessment at UNESA include student learning achievements in the classroom/laboratory/workshop/studio/field, completing assignments, and preparing final assignments.

#### b. Form of Assessment

Assessment of student learning outcomes is carried out in two forms, namely formative assessment and summative assessment. Each form of assessment can be explained as follows.

- 1) Formative assessment is an assessment that aims to:
  - monitor student learning progress;
  - provide feedback so that students meet their learning outcomes; And
  - improve the learning process.
- 2) Summative assessment is an assessment that aims to assess the achievement of student learning outcomes as a basis for determining course completion and study program graduation, by referring to the fulfillment of graduate learning outcomes.

#### c. Assessment Techniques

Formative and summative assessments can be carried out using one or more of the following alternative assessment techniques.

- 1) Written tests/exams are assessments carried out by giving question sheets

that students must answer in writing.

- 2) Oral tests/exams which technically can be carried out directly or indirectly. Directly, this means that lecturers and students meet face to face during assessments, for example during seminars, thesis exams, theses and dissertations, while indirectly, for example using written exam question sheets.
- 3) PPerformance assessment is an assessment carried out through practicum activities, practice, simulations, field practice, and others that enable students to improve their skills.
- 4) Product assessment is an assessment carried out when students make a particular product.
- 5) Portfolio assessment is a continuous assessment in the realm of attitudes, knowledge and skills which is based on a collection of information that shows the development of student learning achievements in a certain period. This information can be in the form of student work from the learning process that is considered the best or student work that shows the development of their abilities to achieve learning outcomes. Types of portfolio assessment are as follows:
  - Development portfolio, contains a collection of student work results that show progress in achieving their abilities in accordance with the learning stages that have been undertaken.
  - Showcase portfolio (showcase) contains the results of student work that shows the results of their best learning performance.
  - Comprehensive portfolio, containing the student's overall work results during the learning process.
- 6) Project assessment is an assessment carried out on student assignments that must be completed within a certain period.
- 7) Participatory assessment is an assessment carried out on student participation in group discussion activities, class discussions, role playing, case analysis, asking questions, presenting arguments, and/or responding to questions.
- 8) Self-assessment/assessment between students is an assessment carried out on one's own performance or the performance of fellow students in a group which emphasizes aspects of faith, noble character, self-confidence, discipline and responsibility in interacting effectively with the social environment,

natural surroundings and the world. and civilization.

d. Assessment Instrument

- 1) Forms of assessment instruments include tests and non-tests. Forms of test assessment include (1) objective tests: filling in, matching, multiple choice; (2) subjective tests: free description, short description), (3) Performance tests. Forms of non-test instruments include observation sheets, self-assessment sheets, peer assessment sheets, attitude assessments, questionnaires, checklists, or product assessment sheets. These instruments are equipped with an assessment guide known as a rubric.
- 2) A rubric is a guide or assessment guide that describes the desired criteria in assessing or grading student learning performance results. The rubric consists of dimensions or aspects that are assessed and criteria for student learning outcomes or indicators of student learning achievement. The purpose of assessment using a rubric is to clarify the dimensions or aspects and levels of assessment of student learning achievements. Apart from that, it is hoped that the rubric can be a driving force or motivator for students to achieve their learning achievements. Rubrics can be comprehensive or generally applicable and can also be specific or only apply to a particular topic.

e. Assessment Approach

The curriculum in a study program is a competency-based curriculum, assessment of learning outcomes in the study program uses the Criteria Reference Approach (PAK). The Criterion Reference Approach (PAK) is an interpretation of assessment scores by comparing course learning outcomes with predetermined criteria.

f. Implementation of assessment

The assessment is carried out in accordance with the learning plan and can be carried out by:

- 1) teaching lecturer or team of teaching lecturers;
- 2) a teaching lecturer or a team of teaching lecturers including students;
- 3) teaching lecturer or team of teaching lecturers including relevant stakeholders;
- 4) supervising lecturer or a team of supervising lecturers including external assessors from different universities, specifically for assessing doctoral program dissertations.

The assessment implementation mechanism includes four stages as presented in Figure 4.4.



**Figure 4.4.**Assessment Implementation Mechanism

Students' final grades are obtained from all forms of summative assessments assigned by lecturers in accordance with the RPS. The assessment system for determining the final grade uses the Benchmark Assessment (PAP). The score for each assessment component is expressed as a number in the range 0 – 100. The weight of each assessment component is determined based on the level of complexity, complexity, depth or complexity in competency formation. For example, in courses that apply project-based learning, a minimum of 50% of the weight of the final grade is determined based on the project assessment. In courses that apply the case method, a minimum of 50% of the final grade weight is determined based on participatory assessment.

#### g. Assessment Reporting

Assessment of student learning achievements in a course is expressed in the form of numbers 0 (zero) to 100 (one hundred), then as a conclusion value it is converted into numbers 0 (zero) to 4 (four) and the letters A, B, C, D , and E using conversions as shown in Table 4.2. The assessment reporting is carried out through an information system known as SIAKADU.

**Table 4.2.**Letter Values, Intervals and Numerical Values that apply at UNESA

Letter	Intervals	Number
A	$85 \leq A < 100$	4
A-	$80 \leq A- < 85$	3.75



<b>Letter</b>	<b>Intervals</b>	<b>Number</b>
B+	$75 \leq B+ < 80$	3.5
B	$70 \leq B < 75$	3
B-	$65 \leq B- < 70$	2.75
C+	$60 \leq C+ < 64$	2.5
C	$55 \leq C < 60$	2
D	$40 \leq D < 54$	1
E	$0 \leq E < 40$	0

Reports on the results of student learning achievement assessments are realized in the form of: a) the results of the assessment of learning achievements in each semester, which are expressed in the Semester Achievement Index (IPS), and b) the cumulative assessment results for the semesters that have been taken, which are expressed in the Cumulative Achievement Index (GPA). The number of credits that a student can take in one semester is determined by the Semester Achievement Index (IPS) obtained by the student in the previous semester with the conditions as presented in Table 4.3.

**Table 4.3.** IP range and number of credits that students can take

<b>Social studies obtained in the previous semester</b>	<b>Credits that can be taken in the following semester</b>
	<b>D4/S1 program</b>
3.50 – 4.00	24 (after 2nd semester)
2.75 – 3.49	20
2.00 – 2.74	16
< 2.00	12

In courses that take the form of activities outside of class; and/or using a summative assessment in the form of a competency test, assessing student learning outcomes expressed in the statement of pass or fail.

#### h. Graduation

Students are declared to have passed if they have completed the entire learning load determined within a certain period of time and have the graduate learning outcomes targeted by the study program with a GPA according to the provisions shown in Table 4.4.

**Table 4.4.** Provisions for Study Load, Study Period, and GPA for Student

## Graduation

No	Program	Study load (SKS)		Curriculum Period (semester)	Longest study period (semester)	Minimum GPA
		Minimum	Maximum			
1	Applied Bachelor/Bachelor	144	146	8	14	2.00
2	Profession	36		2	4	3.00
2	Masters	54	72	3-4	6-8	3.00
4	Doctor	72		6	12	3.00

The study program can determine other conditions for student graduation according to the learning outcomes that have been determined.

Student study loads are stated in Semester Credit Units (SKS) and effective learning is carried out for 16 weeks in each semester including mid-semester exams and final semester exams. One academic year consists of two semesters, namely Odd Semester and Even Semester. However, study programs can hold intermediate semesters which aim to facilitate accelerated completion of student studies, especially for students in the 12th and 13th semesters.

The intermediate semester is held 16 (sixteen) face-to-face meetings over a period of at least 8 (eight) effective weeks which are carried out in the form of lectures, including the intermediate mid-semester exam and the intermediate final exam. The study load for students in a semester is a maximum of 9 (nine) credits. The intermediate semester aims to provide opportunities for students in the 12th and 13th semesters to improve their grades in courses taken in previous semesters. The intermediate semester is held at the end of the Even Semester and can only be attended by active students by paying the intermediate semester fee according to the credits taken. The study load in the intermediate semester is 1 credit which is equal to 370 minutes per week per semester. The implementation of the intermediate semester is regulated by the study program with the minimum number of participants being 20 students.

Graduating students from Applied Bachelor's, Bachelor's, Professional, Master's or Doctoral Programs can be given a satisfactory, very satisfactory or commendation rating if they achieve a certain GPA as shown in Table 4.5.

**Table 4.5.** GPA Range and Program Graduation Predicate

Applied Undergraduate (D4) and Undergraduate	Professional and Masters Programs (S2)	Doctoral Program (S3)	Rating
--	--	-----------------------	--------

(S1) Programs			
3.51 – 4.00	3.76 – 4.00	3.76 – 4.00	With Honors (cum laude)
3.01 – 3.50	3.51 – 3.75	3.51 – 3.75	Very satisfactory
2.76 – 3.00	3.00 – 3.50	3.00 – 3.50	Satisfying

Determination of the Commendation graduation predicate for the Applied Undergraduate and Undergraduate Programs is carried out with the maximum study period being 4 years.

## 2. Nonacademic Assessment

Non-academic assessment is a form of recognition of student achievements in non-academic fields when studying at the Bachelor or Applied Bachelor level at UNESA. An explanation of this assessment is presented as follows.

### a. Assessment Objectives

Non-academic assessment of students at UNESA aims as follows.

- 1) Instilling a scientific attitude, stimulating creativity and innovation, and developing dignified character;
- 2) Improve students' abilities in team work, communication, management skills, organization and leadership;
- 3) Increase student involvement and participation in student activities;
- 4) Providing recognition and appreciation for student activities and achievements;
- 5) Providing documents accompanied by authentic evidence about all activities and all student achievements that are useful for stakeholders when entering the world of work.

### b. Forms, Techniques, Instruments and Assessment Approaches

#### 1) Form of Assessment

Assessment of students' non-academic activities is carried out in the form of validation by academic advisors on evidence of relevant activities that students have reported using the format and instruments provided. The non-academic assessment component at UNESA consists of 5 activity elements, namely: organization and leadership, reasoning and knowledge, interests, talents, hobbies and welfare, community service, and other areas of activity.

#### 2) Assessment Techniques

The student non-academic assessment technique uses a portfolio assessment which records all activities (reasoning and knowledge, interests and talents,

organization and leadership, and social awareness) with the following mechanism.

- a) Every semester, students together with academic advisors plan non-academic activities at the same time as advising/study planning time.
- b) Every semester, students are required to submit an assessment of non-academic activities to the academic advisor regarding the activities that have been realized.
- c) Those who have the right to assess students' non-academic activities are academic advisors by paying attention to evidence or certificates that are considered valid and accountable.
- d) The evidence or certificates above are valid for a maximum of 1 year (two semesters) starting from the current semester.
- e) Academic advisors also have the right to assess irregular activities. The irregular activities referred to are activities whose existence is incidental, such as social activities/natural disaster management, and so on.
- f) Students are required to fulfill a minimum number of non-academic assessment points (based on the UNESA Student Non-Academic Activities Technical Manual) through activities: reasoning and knowledge, interests and talents, organization and leadership, and social awareness.
- g) This non-academic assessment is used as one of the requirements for judicial graduation.

### 3) Assessment Instrument

Students' non-academic aspects are assessed using the following assessment instruments.

- a) Achievement Result Card (KHP) form. This card contains the activities that students have carried out during one semester.
- b) Student Activity Transcript (TKM). Student Activity Transcripts will be issued by academic services when students are declared to have passed the judiciary.

### 4) Assessment Approach

Non-academic assessment at UNESA uses the Benchmark Assessment Approach (PAP) by applying point weights that must be met by students. Benchmarks for non-academic assessment are set out in the Non-Academic Assessment System Implementation Guidelines.

## **E. Semester Learning Plan (RPS)**

The learning process is intended to facilitate students to achieve the predetermined CPL. To achieve these goals, learning requires good and systematic planning and preparation. Learning process planning is prepared for each course in the form of RPS. On this basis, UNESA made a policy that lecture planning in the form of RPS is developed by each lecturer both individually and in expertise groups who teach and develop courses within the curriculum structure.

### **1. Understanding RPS**

RPS is an outline lecture plan that will be carried out for one semester. RPS contains at least:

- a. name of study program, name and course code, semester, credits, name of teaching lecturer;
- b. CPL charged to courses;
- c. final capabilities planned at each learning stage to meet graduate learning outcomes;
- d. study materials related to the abilities to be achieved;
- e. learning methods;
- f. the time provided to achieve abilities at each learning stage;
- g. student learning experiences which are manifested in descriptions of assignments that must be carried out by students during one semester;
- h. criteria, indicators and assessment weights; And
- i. list of references used.

### **2. RPS Development Principles**

The RPS was developed referring to the principles of RPS development, namely: operational, actual, contextual, systematic and comprehensive. Each of these principles can be explained as follows.

- a. The operational principle means that the RPS must be developed in such a way that it is relevant to needs and can be applied in the field.
- b. Actual principles indicate the scope of indicators, study materials, lecture activities and assessment systems taking into account the latest developments in science, technology and art. Therefore, the RPS must be reviewed and adjusted periodically.
- c. The contextual principle means the coverage of study materials and lecture methods based on real life and using events that occur around students. The concepts discussed in lectures must be related to their application in everyday

life.

- d. The systematic principle implies that in operating the RPS components are functionally interconnected in realizing the final capability.
- e. The comprehensive principle means that RPS components such as final abilities and indicators cover the entire domain of human abilities, including both spiritual and social attitudes, knowledge and skills. Comprehensive can also be interpreted as meaning that all activities and components in the RPS are a single unit that interacts and functions in an integrated and harmonious manner in order to realize the final capabilities that have been formulated.

Although the RPS was developed in outline, in its implementation it is also necessary to pay attention to the following principles.

- a. Pay attention to individual differences in students. The implementation of RPS needs to pay attention to individual student differences such as paying attention to differences in initial abilities, intellectual levels, interests, learning motivation, talents, potential, social abilities, emotions, learning styles, special needs, learning speed, cultural background, norms, values, and/or student environment.
- b. Encourage active participation of students. The lecture process is designed to be student-centered to encourage motivation, interest, creativity, initiative, inspiration, independence and enthusiasm for learning.
- c. Develop a culture of reading and writing. The lecture process is designed to develop a love of reading, understanding various reading materials, and expression in various forms of writing.
- d. Provide feedback and follow-up. The RPS is implemented in such a way that it includes a program of providing positive feedback, reinforcement, enrichment and remediation.
- e. Connectedness and integration. RPS is implemented by paying attention to the relationship and integration between CLO (course learning outcomes), KA (final abilities), study materials, lecture activities, learning achievement indicators, assessments, and learning resources in one complete learning experience.
- f. Applying information and communication technology. RPS is implemented by considering the application of information and communication technology in an integrated, systematic and effective manner according to the situation and conditions.



### 3. RPS Components

The RPS developed at UNESA has the following components.

- a. RPS identity, which contains:
  - (1) the name of the university, faculty and study program where the RPS is implemented in accordance with the name stated on the study program establishment permit issued by the Ministry;
  - (2) document code to indicate changes made to the developed RPS;
  - (3) course name;
  - (4) course code;
  - (5) the class of courses selected is based on the type of course, including: National MKWK, Institutional MKWK, Institutional Elective MK, Study Program/Faculty MKWK, or Study Program Choice MK;
  - (6) weight of courses in credits and ects;
  - (7) semester indicating when the RPS was implemented;
  - (8) date of preparation of the RPS;
  - (9) authorization or approval is written with the name of the person giving the approval, namely the study program coordinator;
  - (10) names of RPS developer lecturers;
  - (11) name of course family coordinator;
  - (12) name of the study program coordinator;
- b. Learning outcomes, which contain:
  - (1) CPL study programs charged for related courses which consist of components of attitude, general skills, special skills and knowledge;
  - (2) Course Learning Outcomes (CPMK) is a description of CPL that is formulated more specifically for related courses;
  - (3) The final ability of each learning stage (Sub-CPMK) is the ability to be achieved at each learning stage and is a description of the CPMK;
- c. A brief course description briefly describes the courses listed in the RPS, including the concepts to be studied, benefits, and/or an outline of lecture strategies;
- d. TPB/SDGs supported in the learning process;
- e. Study Materials or Learning Materials, contains a detailed list of study materials or materials that will be studied in related courses. Learning materials can be presented in the form of textbooks, teaching modules, diktats, practical instructions, tutorial modules, reference books, monographs, podcasts, videos and other learning resources. Learning materials must be updated regularly

according to developments in science and technology while still paying attention to the depth and breadth of the material according to the type of program (see Table 4.8);

- f. Library, contains a list of main and supporting references in the form of books, journal articles, or other forms that can be used as learning resources for related courses. It is recommended that relevant learning sources from the research results of teaching lecturers be written in this section to enrich the learning process.
- g. Name of the lecturer in charge of the course, filled in with the list of lecturers in charge of the course and there can be more than one if the learning is carried out by a teaching team;
- h. Prerequisite courses, namely courses that must be programmed first before programming this course,
- i. Learning process matrix containing:
  - (1) Week 1 indicates when each final skill is taught,
  - (2) Final Ability is the ability to be achieved at each stage of learning,
  - (3) Assessment grid, which contains:
    - Assessment indicators are specific and measurable statements that identify the ability or performance of student learning outcomes accompanied by evidence,
    - Assessment criteria are benchmarks used as a measure or measure of learning achievement in assessments based on predetermined indicators. Assessment criteria are guidelines for assessors so that assessments are consistent and unbiased in the form of scoring guidelines or rubrics. Criteria can be quantitative or qualitative,
    - Assessment techniques in the form of tests or non-tests (observation, performance assessment, product assessment, portfolio assessment),
    - The assessment weight is the percentage of the success assessment for each sub-CPMK achievement against the overall success score in the course and the total is 100%.
  - (4) Forms of learning, learning methods, student assignments, estimated time, contains:
    - Forms of learning can take the form of lectures, responses, tutorials, seminars, practicums, studio practice, workshop practice, field practice, research, community service, thematic KKN, student exchange, internship or work practice, teaching assistance, humanitarian projects,

entrepreneurial activities, studies /independent projects, and/or other equivalent forms of learning,

- Learning methods can take the form of group discussions, simulations and role playing, case studies, collaborative learning, cooperative learning, project-based learning, problem-based learning, contextual learning, discovery learning, self-directed learning, and other equivalent methods,
- The learning mode can be online, offline, or mixed (blended learning),
- Student assignments consist of student learning activities in the form of assignments to achieve final abilities at each learning stage. In this section, the tasks that students must complete during one semester are briefly described.
- The estimated time for each learning activity is written based on the weight of the course and the form of learning.

(5) Learning materials and libraries, containing learning materials at each stage of learning accompanied by a list of references that students can use to study the material.

#### 4. RPS Development Steps

As stated at the beginning, RPS refers to course learning outcomes. Each course has course learning outcomes which are the result of the accumulation of learning experiences and final abilities that have been achieved. Starting from this understanding, for each course one RPS is developed to provide an overview of the lectures for that course during one semester. The steps for developing RPS are as follows.

- a. **Fill in identity**RPS
- b. **Identify study program CPL**charged in related courses, including attitudes, general skills, special skills and knowledge. The determination of the CPL charged for courses is agreed upon by the curriculum team and study program coordinator, and is stated in the study program curriculum document. Examples of study program CPLs charged for research methodology courses in undergraduate programs are presented in Table 4.10.
- c. **Formulate CPMK**or Course Learning Outcomes (CLO) which are more specific based on the CPL charged for the related course. The process of determining CPMK can be done using task analysis. With task analysis, RPS developers identify what knowledge, skills, attitudes can be built through the learning experiences provided by certain courses, which support the study program's CPL.

CPMK is used as an assessment guide in determining the graduation of students who program certain courses. CPMK is formulated in verb form accompanied by a scope of knowledge, skills and/or attitudes that reflect aspects of the content of the CPMK. An example of a CPMK formulation for a research methodology course in an undergraduate program is presented in Table 4.7.

**Table 4.6.**Study Program CPL charged to the Research Methodology

kode	CPL Prodi yang dibebankan pada mata kuliah
<b>SIKAP (S)</b>	
S9	Menunjukkan sikap bertanggungjawab atas pekerjaan di bidang keahliannya secara mandiri.
<b>PENGETAHUAN (P)</b>	
P3	Menguasai konsep teoritis IPTEKS, serta menguasai formulasi penyelesaian masalah prosedural di industri.
<b>KETERAMPILAN UMUM (KU)</b>	
KU2	Mampu menunjukkan kinerja mandiri, bermutu, dan terukur.
<b>KETERAMPILAN KHUSUS (KK)</b>	
KK4	Mampu merancang dan menjalankan penelitian dengan metodologi yang benar khususnya terkait dengan pengembangan bidang IPTEKS.

Constitutional Court

(Source:Junaidi et al. (2020))

**Table 4.7.**CPMK formulation in MK Research Methodology

Kode	Capaian Pembelajaran Mata Kuliah (CPMK)
CPMK1	Menunjukkan sikap bertanggungjawab atas pekerjaan di bidang keahliannya secara mandiri (CPL-1).
CPMK2	Menguasai konsep teoritis IPTEKS, serta memformulasi penyelesaian masalah prosedural di teknik (CPL-2).
CPMK3	Mampu menunjukkan kinerja mandiri, bermutu, dan terukur (CPL-3).
CPMK4	Mampu merancang penelitian dengan metodologi yang benar terkait dengan pengembangan bidang teknik(CPL-4).

(Source:Junaidi et al. (2020))

- d. **Formulating final capabilities (Sub-CPMK).** Each CPMK is further broken down into several final capabilities (Sub-CPMK) which are narrower in scope. Final abilities are a combination of integrated knowledge, skills and attitudes needed by someone to carry out a particular unit of study material/task. In general,

people can be said to be competent in certain study material/work/tasks if that person has the minimum knowledge, skills and work attitudes that can be used to complete the task. To achieve CPMK, students must first master a number of final skills that build CPMK. The final ability formulation uses action verbs from either the cognitive, affective or psychomotor areas and is composed of behavioral elements and the scope of course content (references). A good Sub-CPMK formulation uses the SMART principle (Specific, Measurable, Achievable, Realistic, and Time-bound). The Sub-CPMK formulation must clearly and specifically describe the desired abilities (specific), have target learning outcomes that can be measured (measurable), the desired abilities can be achieved by students (achievable), in the form of abilities that are realistic (realistic) and can be achieved within time. which corresponds to the SKS weight (time-bound). An example of the final capability formulation for a research methodology course in an undergraduate program is presented in Table 4.9.

**Table 4.8.**Formulation of Sub-CPMK in MK Research Methodology

Kode	Sub Capaian Pembelajaran Mata Kuliah (Sub-CPMK)
Sub-CPMK1	mampu menjelaskan tentang Pengetahuan, Ilmu, filsafat & etika dan plagiasi dlm penelitian. (CPMK-2)
Sub-CPMK2	mampu menjelaskan berbagai metodologi penelitian kualitatif dan kuantitatif.(CPMK-4)
Sub-CPMK3	mampu merumuskan permasalahan penelitian dan merumuskan hipotesis penelitian dengan sumber rujukan bermutu, terukur dan sahih.(CPMK-2)
Sub-CPMK4	mampu menjelaskan validitas dan reliabilitas pengukuran dalam penelitian.(CPMK-4)
Sub-CPMK5	mampu memilih dan menetapkan sampel penelitian dengan sistematis, bermutu, dan terukur.(CPMK-4)
Sub-CPMK6	mampu merancang penelitian dalam bentuk proposal penelitian TA & mempresentasikan nya dengan tanggung jawab dan etika. (CPMK-1, CPMK-3, CPMK-4)

(Source:Junaidi et al. (2020))

- e. **Explain**Sub-CPMK into indicators.So that the achievement of the Sub-CPMK (final capability) can be measured, the Sub-CPMK is first described as an assessment indicator. The translation of Sub-CPMK into assessment indicators is carried out through task analysis and material analysis. Task analysis is carried out by breaking down the behavior in the Sub-CPMK into more



operational sub-behaviors. Material analysis is carried out by breaking down lecture material into sub-materials that have a narrower breadth. It should be noted that the indicator formulation should consist of behavior (operational verb) and references or course content. Indicators serve as a guide in selecting lecture materials and strategies, forms and assessment instruments. An example of the breakdown of Sub-CPMK into assessment indicators in research methodology courses in undergraduate programs is presented in Table 4.10.

**Table 4.9.**Example of Formulation of Sub-CPMK Assessment Indicators in MK Research Methodology

Sub-CPMK	Assessment Indicators
Sub-CPMK 1: able to explain knowledge, knowledge, philosophy and ethics, as well as plagiarism in research	1.1 Accuracy in explaining knowledge, science and philosophy. 1.2 Accuracy in explaining the meaning of ethics in research. 1.3 Accurately explains the meaning of plagiarism, preventing plagiarism, and the consequences of plagiarism.
Sub-CPMK 2: able to explain the stages of qualitative and quantitative research methodology	2.1 Accuracy in distinguishing the meaning and characteristics of qualitative and quantitative research. 2.2 Accuracy in explaining the stages of qualitative and quantitative research methodology.
Sub-CPMK 3: able to formulate research problems and hypotheses using quality, measurable and valid reference sources	3.1 Accuracy in organizing systematics and abstracting journal articles. 3.2 Accuracy and suitability of formulating descriptive, comparative, associative and comparative-associative problems and hypotheses.
etc...	

(Source:Junaidi et al. (2020))

- f. **Determinestudy materials/lecture materials.** The choice of study material must truly be material that is relevant and supports the achievement of final abilities. For this reason, the selection of study materials can be done by referring to the formulation of assessment indicators, especially the phrases behind the verb of each indicator. An example of selecting study materials based on assessment indicators in research methodology courses in undergraduate programs is presented in Table 4.11.

**Table 4.10.**Example of Selection of Study Materials based on the Formulation of Assessment Indicators in the Research Methodology Constitutional Court



Indicator formulation	Study Materials
1.1 Accuracy in explaining knowledge, science and philosophy.	Understanding knowledge, science and philosophy, scientific and non-scientific approaches, scientific tasks, and research.
1.2 Accuracy in explaining the meaning of ethics in research.	Ethics in research.
1.3 Accurately explains the meaning of plagiarism, preventing plagiarism, and the consequences of plagiarism.	Plagiarism in research.
2.1 Accuracy in distinguishing the meaning and characteristics of qualitative and quantitative research.	Characteristics of historical research, descriptive research, developmental research, case and field research, correlational research, comparative causal research, real experimental research, quasi-experimental research, action research.
2.2 Accuracy in explaining the stages of qualitative and quantitative research methodology.	Historical research methodology, descriptive research, developmental research, case and field research, correlational research, comparative causal research, real experimental research, quasi-experimental research, action research.

(Source:Junaidi et al. (2020))

- g. **Choose relevant learning strategies to achieve the final abilities formulated.** There are indicators that can only be taught in one way, so like it or not, lecturers have to choose that method as a learning strategy. For example, skilled in making research proposals. The strategy chosen is the practice of making a research proposal. Meanwhile, indicators explaining knowledge, science and philosophy can be achieved through various strategies, such as reading assignments, discussions, listening to explanations and so on. If conditions allow it to be achieved through various strategies, then the aspect that needs to be considered in choosing this learning strategy is the intensity of student involvement.
- h. **Selecting learning media/sources.** Media is a channel for conveying messages. Therefore, the media chosen is adjusted to the message to be conveyed. Considerations in choosing media include indicators or goals to be achieved, practicality and effectiveness. Likewise with learning sources, determining learning sources is done by selecting learning sources that (a) have a level of

relevance and suitability to the indicators; (b) paying attention to the up-to-dateness and correctness of the concepts offered. Apart from that, learning sources can also be people who are experts in their field.

- i. **Formulate lecture activities/learning experiences.** The lecture activities written in the RPS are not detailed lecture scenarios but only the main activities that are planned to be carried out. The lecture experience is formulated to consist of three things, namely (a) student activities (student assignments), (b) study materials, and (c) learning resources. Often one indicator requires separate lecture activities, while several other indicators can be achieved through several lecture activities. An example of the formulation of lecture activities in a research methodology course in an undergraduate program is presented in Table 4.12.

**Table 4.11.** Example of Lecture Activity Formulation in Research Methodology MK

Indicator	Learning Activities/Assignments
1.1 Accuracy in explaining knowledge, science and philosophy.	Prepare a summary in the form of a paper regarding the meaning of knowledge, science and philosophy along with examples.
1.2 Accuracy in explaining the meaning of ethics in research.	Compile a case study paper on ethics in research related to plagiarism.
1.3 Accurately explains the meaning of plagiarism, preventing plagiarism, and the consequences of plagiarism.	

As mentioned above, if there are indicators that can be achieved through several types of lecture activities, lecture activities should be chosen that more intensively involve students. For example, indicator 1.1: accuracy in explaining knowledge, science and philosophy can be achieved through various activities such as: reading books, discussing with colleagues, listening to lecturers' explanations, and so on. In such cases, choose the "best" based on the intensity of student involvement both physically and mentally. Compiling a summary in the form of a paper by students really helps students understand and recall the information compared to the task of reading or hearing the information. For project-based learning activities, assignment plans for students need to be outlined clearly and specifically to help students achieve the expected learning outcomes. An example of a Student Assignment Plan (RTM) for a research methodology course in an undergraduate program is presented in Table 4.13.

**Table 4.12.** Example of RTM in MK Research Methodology

LOGO	NAMA PERGURUAN TINGGI				
	FAKULTAS				
	DEPARTEMEN / JURUSAN / PROGRAM STUDI				
RENCANA TUGAS MAHASISWA					
MATA KULIAH	Metodologi Penelitian (S1)				
KODE	TF141361	sks	2	SEMESTER	6
DOSEN	Dr. Ir. Syamsul Arifin, MT.				
PENGAMPU					
BENTUK TUGAS					
Final Project					
JUDUL TUGAS					
Tugas-8ABC Final Project: Menyusun proposal penelitian dan mempresentasikan secara mandiri.					
SUB CAPAIAN PEMBELAJARAN MATA KULIAH					
Sub-CPMK-6: mampu merancang penelitian dalam bentuk proposal penelitian TA & mempresentasikan nya dengan tanggung jawab dan etika. [C6,A3,P3] (CPMK1, CPMK3, CPMK4).					
DISKRIPSI TUGAS					
Tugas ini bertujuan agar mahasiswa mampu untuk menyusun proposal penelitian sesuai dengan standar internasional. Mahasiswa belajar membaca dan meringkas artikel jurnal sesuai dengan tema penelitian yang diinginkan. Kemudian merumuskan permasalahan, dan membuat hipotesis, menyusun kerangka penelitian, dan akhirnya membuat proposal penelitian. Kemudian mahasiswa mendesain slide presentasi proposal dan mempresentasikannya untuk meningkatkan kemampuan komunikasi ilmiah dalam bentuk presentasi.					
METODE Pengerjaan TUGAS					
1. Memilih dan mengkaji minimal 10 journal nasional & internasional sesuai bidang yang diminati;					
2. Membuat ringkasan dari minimal 10 journal yang telah dipilih;					
3. Menentukan judul proposal penelitian;					
4. Merumuskan masalah dan hipotesis penelitian;					
5. Memilih dan merancang metodologi penelitian;					
6. Menyusun proposal penelitian;					
7. Menyusun bahan & slide presentasi proposal penelitian;					
8. Presentasi proposal penelitian di kelas.					
BENTUK DAN FORMAT LUARAN					
a. Obyek Garapan: Penyusunan Proposal Penelitian Skripsi (Tugas Akhir)					
b. Bentuk Luaran:					
1. Kumpulan ringkasan journal ditulis dengan MS Word dengan sistematika penulisan ringkasan journal, dikumpulkan dengan format ekstensi (*.rtf), dengan sistematika nama file: (Tugas-9-Ringkasan-no nrp mhs-nama depan mhs.rtf);					
2. Proposal ditulis dengan MS Word dengan sistematika dan format sesuai dengan standar panduan penulisan proposal, dikumpulkan dengan format ekstensi (*.rtf), dengan sistematika nama file: (Tugas-9-Proposal-no nrp mhs-nama depan mhs.rtf);					
3. Slide Presentasi PowerPoint, terdiri dari : Text, grafik, tabel, gambar, animasi ataupun video clips, minimum 10 slide. Dikumpulkan dlm bentuk softcopy format ekstensi (*.ppt), dengan sistematika nama file: (Tugas-9-Slide-no nrp mhs-nama depan mhs.ppt);					

INDIKATOR, KRITERIA DAN BOBOT PENILAIAN	
<b>a. Ringkasan hasil kajian journal (bobot 20%)</b> Ringkasan journal dengan sistematika dan format yang telah ditetapkan, kemutakhiran journal (5 tahun terakhir), kejelasan dan ketajaman meringkas, konsistensi dan kerapian dalam sajian tulisan.	
<b>b. Proposal Penelitian (30%)</b> <ol style="list-style-type: none"> <li>1. Ketepatan sistematika penyusunan proposal sesuai dengan standar panduan penulisan proposal;</li> <li>2. Ketepatan tata tulis proposal sesuai dengan ejaan bahasa Indonesia yang benar dan sesuai dengan standar APA dalam penyajian tabel, gambar, penulisan rujukan dan penisan sitasi;</li> <li>3. Konsistensi dalam penggunaan istilah, warna (jika ada) simbol dan lambang;</li> <li>4. Kerapian sajian buku proposal yang dikumpulkan;</li> <li>5. Kelengkapan penggunaan fitur-fitur yang ada dalam MS Word dalam penulisan dan sajian proposal penelitian.</li> <li>6. Proposal ditulis dalam format A4, margin 3-2-2-2, Huruf Cambria, ukuran 12 (teks utama), 11 (keterangan gambar, tabel, grafik, isi tabel).</li> <li>7. Penyajian warna dalam proposal hanya jika diperlukan saja.</li> </ol>	
<b>c. Penyusunan Slide Presentasi (bobot 20%)</b> Jelas dan konsisten, Sedehana & inovative, menampilkan gambar & blok sistem, tulisan menggunakan font yang mudah dibaca, jika diperlukan didukung dengan gambar dan vedio clip yang relevant.	
<b>d. Presentasi (bobot 30%)</b> Bahasa komunikatif, penguasaan materi, penguasaan audiensi, pengendalian waktu (10 menit presentasi + 5 menit diskusi), kejelasan & ketajaman paparan, penguasaan media presentasi.	
<b>e. Bobot penilaian 30% dari keseluruhan penilaian mata kuliah ini.</b>	
JADWAL PELAKSANAAN	
Penetapan Judul dan Kerangka Penelitian	1 Mei 2020
Meringkas Journal	25 April - 1 Mei 2020
Menyusun proposal & Asistensi	25 April – 9 Mei 2020
Presentasi proposal	17-21 Mei 2020
Pengumpulan Luaran Tugas	17 Mei 2020
LAIN-LAIN	
Bobot penilaian tugas ini adalah 30% dari dari 100% penilaian mata kuliah ini;	
Tugas dikerjakan dan dipresentasikan secara mandiri;	
DAFTAR RUJUKAN	
Creswell, J. W. (2012). <i>Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research</i> (4 ed.). Boston: PEARSON. Katz, M. (2006). <i>From Research to Manuscript: A Guide to Scientific Writing</i> . London: Springer. Kothari, C. R. (2004). <i>Research Methodology: Methods and Techniques</i> (Second Revised ed.). New Delhi: New Age Internasional (P) Limited. Singh, V. (2006). <i>Fundamental of Research Methodology and Statistics</i> . New York: New Age International. Tuckman, B. W., & Harper, B. E. (February 9, 2012). <i>Conducting Educational Research</i> (6 ed.). Maryland, USA: Rowman & Littlefield Publishers.	

Source:Junaidi et al. (2020))

- j. **Determine assessment strategies, forms and instruments.** The selection of assessment strategies, forms and instruments is guided by the behavior stated in the indicator formulation. The formulation of the verb with its measuring assessment must be adequate. The word adequacy contains the meaning of a high level of accuracy. Just to illustrate: to measure the mass of a ring, you must use a (appropriate) scale. If a rice scale is used, of course this is not (careful)--- Adequacy includes these two characteristics. Table 4.14 below shows the adequacy of indicators, strategies, and forms and examples of assessment items.



**Table 4.13.**Indicators, Strategies, Forms and Examples of Assessment

Indicator	Assessment Strategy	Form of Assessment	Instrument Items
Explain the meaning of style	Oral or written	Description	Explain the meaning of style
Mention examples of style concepts	Oral	Answer short	Give examples of style concepts
Skilled at swimming breaststroke	Performance	Sheet observation	Swimming assignments, observation sheets, and scoring rubrics
Determine the characteristics of prime numbers	Paper and Pencil Test	Multiple choice	The following are characteristics of prime numbers, namely they have... A. two factors B. three factors C. four factors
Skilled in compiling practical reports	Report Products	Sheet evaluation product	Product assessment sheet and assessment rubric
Able to work together	Observation	Sheet Observation attitude	Attitude observation sheet and assessment rubric

- k. Determine the time allocation to achieve final capabilities.Determining the time allocation to reach each train (Sub-CPMK) is done by first determining the average time allocation by dividing the CPMK time allocation by the number of trains. Next, analyze the complexity and level of difficulty of achieving each train based on experience. Trains that are less complex can have their time allocated reduced to be given to trains that are more complex. The time allocation statement in the RPS is realized through the planned number of weeks. Thus, it may be that a KA can only be achieved after 2 or 3 weeks (meeting), while another KA may only need one week (meeting).

## 5. RPS (Course Semester Plan) format

The RPS format used at UNESA with the RPS components described above can be compiled automatically via the SINDIG application that has been developed by UNESA. This application can be accessed via a link<https://sindig.unesa.ac.id>to make it easier for lecturers to prepare RPS in the agreed format.

## CHAPTER V CURRICULUM EVALUATION

In order to improve the quality of education, the curriculum needs to be evaluated for its effectiveness and efficiency so that it is in line with scientific developments, government and institutional policies, as well as the needs of graduate users.

### A. Purpose of Curriculum Evaluation

Evaluation of curriculum implementation is carried out to evaluate the direction of curriculum implementation. In the development process, improvements are needed whose input is obtained from the evaluation results.

Evaluation of curriculum implementation must be carried out as a whole, starting from the individual lecturer, the team of supporting lecturers, the study program curriculum development team, and the authorities. In addition, the internal quality assurance system is also involved in measuring the quality of curriculum implementation.

### B. Curriculum Evaluation Model

The Discrepancy Evaluation Model can be used as a reference for curriculum evaluation models. Evaluation in this model is defined as an improvement process by evaluating performance by comparing it with predetermined standards. The results of this comparison then produce discrepancy information (Steinmetz, 2000).

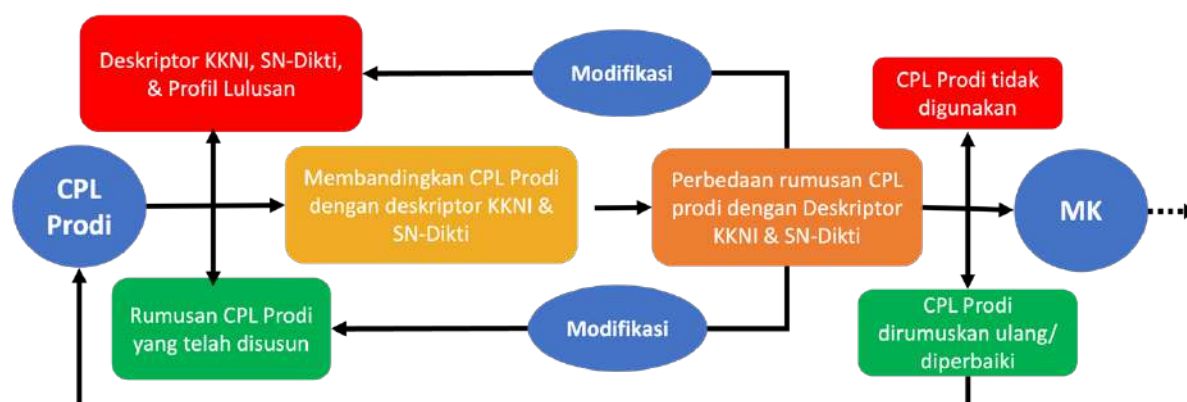
In curriculum development, it is also necessary to prepare an evaluation mechanism to ensure the success of study program graduate learning outcomes (CPL) in meeting existing standards. In Permendikbudristek No. 53 of 2023, article 5, National Education Standards which consist of:

1. educational output standards, namely graduate competency standards;
2. education process standards, including learning standards; evaluation; and management);
3. educational input standards, including content standards; standards for lecturers and education staff; facilities and infrastructure standards; and financing standards)

serve as a reference in compiling, organizing and evaluating the curriculum. The UNESA Curriculum Guidelines are prepared based on National Education Standards, KKNi Descriptors, Higher Education Standards, and Graduate Profiles as



Reference Standards in evaluating study program learning outcomes. Figure 5.1 illustrates the CPL evaluation mechanism for study programs based on the discrepancy model.



**Figure 5.1.**Discrepancy Model for Evaluation of Study Program Curriculum

The CPL of the study program that has been formulated is compared with the Reference Standard. This comparison produces information on whether the study program's CPL formulation is in accordance with standards both in the specific knowledge and skills aspects (KKNI Descriptors) and general attitudes and skills aspects (National Education Standards).

Based on Minister of Education and Culture Regulation No. 53 of 2023, article 25, the entire learning process contained in the curriculum is repaired and improved continuously by the study program based on the results of evaluations of at least 2 (two) of the following aspects:

- learning activities for each generation;
- number of active students in each class;
- Curriculum Period;
- student study completion period; And
- the level of absorption of student graduates in the world of work.

If based on the evaluation, differences or discrepancies are found with the Reference Standards, then the study program's CPL formulation needs to be modified, or if it does not match at all then the study program's CPL is not used. This evaluation is carried out for each study program CPL item. After the revision is carried out, the study program CPL is determined and becomes a reference in the next evaluation process, for example the evaluation of the course structure (MK). In detail, the CPL evaluation is described in the Guidelines for Assessment of Learning Achievement in the Study Program Curriculum.

## **C. Types of Curriculum Evaluation**

In evaluating the curriculum, study programs need to carry out evaluations that include partial curriculum evaluations and comprehensive curriculum evaluations. Partial curriculum evaluation aims to make improvements to curriculum implementation, while comprehensive curriculum evaluation aims to determine the results of curriculum implementation. Study programs are required to carry out partial and comprehensive curriculum evaluations.

### **1. Partial Curriculum Evaluation (Formative Evaluation)**

Formative evaluation is carried out throughout the curriculum, either every semester or annually. Formative evaluation can be referred to as short/medium term evaluation. During the learning process, the course teaching team (DPMK) is required to evaluate the CPMK. Lecturers can evaluate one or a group of materials where statistics on achievement scores for assignments, tests, and class atmosphere are taken into consideration. Then, periodically the lecturer team coordinates with lecturers in their field of expertise to accommodate evaluations from each DPMK. This process also recapitulates the achievement of the Study Program CPL imposed on the Constitutional Court and adjusts it to suit needs research output and lecturer community service. The results of this evaluation are used as input for improving methods and learning tools (RPS, teaching materials, etc.).

### **2. Comprehensive Curriculum Evaluation (Summative Evaluation)**

Meanwhile, the summative evaluation is comprehensive in order to review and improve the entire curriculum content according to the validity period. This evaluation can be prepared in stages starting in the third year of curriculum implementation until in the fourth or fifth year it can produce a revised curriculum formulation. At this stage, the review also involves:

1. internal and external stakeholders,
2. analysis of curriculum effectiveness from a team of lecturers or experts in the field of science,
3. analysis of graduate search results (tracer study),
4. graduate user needs analysis,
5. SWOT analysis of study program capabilities,
6. analysis of science and technology developments, association recommendations, and study program research roadmaps,

The curriculum control process is carried out by the study program and monitored and assisted by the Higher Education quality assurance unit/institution.

Curriculum improvements are based on the results of curriculum evaluations, both partial and comprehensive.

## CHAPTER VI GOVERNANCE

Curriculum development, implementation and evaluation require governance in accordance with the main tasks and functions of each element involved. Governance guidelines are as follows.

### **A. Curriculum Implementation**

#### **1. Role of Related Parties**

##### **a. University**

- 1) The university creates cooperation documents (Memorandum of Understanding/MoU) with partners, both universities, schools, business and industry or others related to the curriculum.
- 2) The university endorses UNESA curriculum development, implementation and evaluation guidelines.

##### **b. University Academic Senate (SAU)**

- SAU gave consideration to the UNESA curriculum development, implementation and evaluation guidelines before it was approved.

##### **c. Academic Directorate**

- 1) The Academic Directorate prepares guidelines governing the development, implementation and evaluation of the UNESA curriculum.
- 2) The Academic Directorate prepares a list of mandatory/elective courses at University level that students can take.
- 3) The Academic Directorate accompanies study programs in curriculum development, implementation and evaluation.
- 4) The Academic Directorate facilitates information systems and curriculum management in an applicable and comprehensive manner.

##### **d. Faculty/SPs**

- 1) Faculties/SPs determine the study program curriculum documents.
- 2) Faculties/SPs prepare a list of mandatory/elective courses at Faculty/SPs level that students can take.
- 3) Faculties/SPs create cooperation documents (Memorandum of Cooperation/MoA and/or Cooperation Agreement/IA) with partners, whether fellow universities, schools, or the world of business and industry or others related to the curriculum.

e. Study Program

- 1) The study program restructures or revitalizes the study program curriculum in accordance with UNESA curriculum development, implementation and evaluation guidelines.
- 2) The study program prepares study program curriculum documents in accordance with UNESA curriculum development, implementation and evaluation guidelines.
- 3) The study program implements the study program curriculum in accordance with the UNESA curriculum development, implementation and evaluation guidelines.
- 4) The study program evaluates the study program curriculum in accordance with the UNESA curriculum development, implementation and evaluation guidelines.
- 5) The study program follows up on the results of the curriculum audit in the context of curriculum restructuring/revitalization.

f. Quality Assurance Institute (LPM)

- 1) LPM sets UNESA quality policies and curriculum quality standards.
- 2) LPM carries out curriculum audits in UNESA environmental study programs based on the Curriculum Audit Guidelines.

g. Student

- Students provide feedback to the study program regarding the structure and implementation of the curriculum.

h. Alumni

- Partners provide feedback to study programs regarding curriculum structure, curriculum implementation, and the needs of the business/industrial world.

i. Partner

- 1) The partners collaborate in the form of a Memorandum of Understanding/MoU, Memorandum of Cooperation/MoA, and Cooperation Agreement/IA related to the curriculum.
- 2) Partners provide feedback to study programs regarding the curriculum structure and the needs of the business/industrial world.

## 2. Coordination and Management

a. Internal Level

- 1) Curriculum development, implementation and evaluation at the university level is under the coordination and management of the Vice Chancellor for Academic, Student and Alumni Affairs, cq Academic Directorate.
  - 2) Development, implementation and evaluation of curriculum at the faculty/SPs level under the coordination and management of the Dean/Director, cq Deputy Dean/Deputy Director for Academic, Student Affairs, Alumni, Research and PKM.
  - 3) Implementation of curriculum audits throughout the university under the coordination and management of LPM.
- b. External Level
- 1) Collaboration regarding curriculum development, implementation and evaluation at the university level with partners is under the coordination and management of the Deputy Chancellor for Planning, Development, Cooperation and Information and Communication Technology and the Deputy Chancellor for Academic, Student Affairs and Alumni Affairs.
  - 2) Collaboration regarding curriculum development, implementation and evaluation at the faculty/SPs level with partners is under the coordination and management of the Dean, cq Deputy Dean/Deputy Director for Academic, Student Affairs, Alumni, Research and PKM, and Coordinating Programs.

### **3. Enforcement**

Guidelines for Development, Implementation and Evaluation of the 2023 Curriculum will come into effect from the odd semester 2023/2024 until there are changes.

## **B. Curriculum Audit**

### **1. Principle**

- a. Curriculum audit is an activity intended to carry out a comprehensive assessment of the curriculum in UNESA study programs.
- b. Curriculum audits are carried out based on UNESA curriculum audit guidelines.
- c. The results of curriculum audits are used as material for planning, determining, implementing, monitoring, evaluating, and continuously improving to achieve established standards and criteria.



## **2. Criteria**

- a. Curriculum audit criteria refer to the established quality policy, quality standards and/or curriculum quality manual.
- b. Curriculum audit criteria are determined based on the UNESA Curriculum Audit Guidelines.

## **3. Operationalization**

- a. Curriculum audits are carried out periodically at least once a year.
- b. Curriculum audits are coordinated and managed by LPM.
- c. The audit stages consist of: planning, preparation, implementation, processing and presentation of audit results.
- a. Implementation of curriculum audits is based on the Curriculum Audit Guidelines.

## CHAPTER VII CONCLUSION

The curriculum must continue to be updated regularly to be able to provide students with experiences and competencies that are in line with the demands and needs of society. UNESA also actively reviews and updates the curriculum. The 2023 UNESA Curriculum Development, Implementation and Evaluation Guidelines are a form of updating the curriculum in response to global issues, MBKM policies, as well as changes in UNESA's vision as PTNBH.

The 2023 UNESA Curriculum Development, Implementation and Evaluation Guidelines were prepared to provide direction for study programs within UNESA in developing, implementing and evaluating the curriculum. This guideline can also be used by leaders and quality assurance teams in preparing policies or rules related to the curriculum. With these guidelines, it is hoped that curriculum development, implementation and evaluation can be carried out in accordance with applicable regulations.

The 2023 UNESA Curriculum Development, Implementation and Evaluation Guidelines have been successfully completed thanks to the hard work and smart work of the UNESA curriculum team. However, on the other hand, there may still be some technical matters that have not been described in this guideline. For this reason, this guideline is not final, but will undergo revision in accordance with constructive input from the expert team.

## BIBLIOGRAPHY

- Akinsanya, P. O. (2014). Dewey's Pragmatic Education: An Eclectic Philosophy of Note. *Educational Practice and Innovation*, 1(1), 13-16.
- Bovee, C. (1997). *Business Communication Today*. Prentice Hall.
- Heleta, S., & Bagus, T. (2021). Sustainable development goals and higher education: leaving many behind. *Higher Education*, 81(1), 163-177.
- Junaidi, A., Wulandari, D., Arifin, S., Soetanto, H., Kusumawardani, SS, Wastutiningsih, SP, . . . Jobih. (2020). *Guide to Preparing a Higher Education Curriculum in the Industry 4.0 Era to Support Independent Learning - Independent Campuses*. Directorate General of Higher Education, Ministry of Education and Culture.
- Ministry of National Development Planning. (2020). *Technical Guidelines for Preparing Action Plans for Sustainable Development Goals (SDGs)*. Ministry of National Development Planning.
- Kohlberg, L., & Gilligan, C. (2014). Moral development. *Psychology: Revisiting the Classical Studies*, 164.
- Independent Education Accreditation Institute. (2022). *Accreditation of Undergraduate Study Programs: Supplement to the Accreditation Instrument*. Independent Education Accreditation Institute.
- Miranda, J., Navarrete, C., Noguez, J., Molina-Espinosa, J.-M., Ramirez-Montoya, M.-S., Navarro-Tuch, S.A., . . . Molina, A. (2021). The core components of education 4.0 in higher education: Three case studies in engineering education. *Computers & Electrical Engineering*, 93, 107278.
- P21. (2019). *Framework for 21st Century Learning*. [www.P21.org](http://www.P21.org)
- Slavin, R.E. (2006). *Educational psychology: Theory and practice* (8 ed.). Pearson Education.
- Smaldino, S. E., Lowther, D. L., & Russell, J. D. (2014). *Instructional technology & media for learning: Learning technology and media for learning*. Prenada Media.
- Spady, W. G. (1994). *Outcome-Based Education: Critical Issues and Answers*. ERIC.
- Steinmetz, A. (2000). The discrepancy evaluation model. In *Evaluation models: Viewpoints on educational and human services evaluation* (pp. 127-143). Springer.