Universitas Negeri Yogyakarta

# CURRICULUM

MASTER OF EDUCATION IN

## EDUCATIONAL TECHNOLOGY

Excellent, Creative, and Continuously Innovative

## WELCOME FROM THE DEAN OF FIP UNY

Praise be to Allah SWT for His blessings and grace upon us all, so that the curriculum draft for the Master of Learning Technology study program, Faculty of Educational Sciences, UNY, can be completed well. The curriculum is the soul of the implementation of education; the development and revision of the curriculum is a necessity for the realization of quality educational services.

The development of the curriculum of study programs within the Faculty of Education, Yogyakarta State University, is carried out in line with various demands for change due to the rapid acceleration of change in various aspects of life. The Faculty of Education, Yogyakarta State University, is expected to be able to produce superior, competitive, and adaptive graduates to these demands.

The curriculum development of the Faculty of Education, Yogyakarta State University, also refers to various regulatory changes, including the implementation of the Indonesian National Qualifications Framework, the Higher Education System Law, and the National Higher Education Standards. Through these efforts, it is hoped that UNY Faculty of Education graduates will emerge as graduates capable of optimally contributing to national development and playing a role in local, regional, and global contexts.

Thank you to all those who assisted in the completion of the curriculum draft for the study program within the Faculty of Education, Yogyakarta State University. May Allah SWT always bestow His mercy and blessings upon us all. Amen.

Yogyakarta, April 20, 2025
Dean of FIP UNY

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## FOREWORD OF THE STUDY PROGRAM COORDINATOR I

Praise and gratitude we offer to the presence of God Almighty who has bestowed His grace and guidance so that the Curriculum manuscript for the Master's Program in Learning Technology (TP) of the Faculty of Education (FIP) Yogyakarta State University (UNY) can be compiled and completed according to the target. Review and revision of the curriculum is a necessity in realizing quality graduates. The development of the Master's Program curriculum for the 2025 Academic Year is aligned with considering the dynamics of community needs, especially related to the increasingly rapidly developing technologybased learning ( *soft* and *hard technology* ). The Master's Program curriculum for the 2025 academic year is designed to meet the needs of developing educational technology and to produce graduates who excel in the application of educational technology, research and development methodology, assessment, learning evaluation, and scientific publication. The Master's Program curriculum for the 2025 academic year is not limited to a course structure but rather as a program that provides adequate competency capabilities for graduates as TP developers, academics (educators), educational consultants, instructional leaders, and managers of educational and training programs.

The development of the Master's Program curriculum for the 2025 academic year refers to changes in regulations for the implementation of the Indonesian National Qualifications Framework Level 8, the Higher Education System Law, the National Standards for Higher Education, the Vision and Mission of UNY, the Vision and Mission of the Faculty of Social and Political Sciences, and the Scientific Vision of the Program. The Master's Program curriculum for the 2025 academic year was developed by taking into account and utilizing input from students, lecturers, the Faculty of Social and Political Sciences Leadership, the Quality Assurance Team, the Program Development Team, alumni, and graduate users. Through these efforts, it is hoped that the new curriculum for the Master's Program will be on target, so that graduates of the Master's Program in Social and Political Sciences, UNY, will be able to contribute optimally to national development, especially educational development, both nationally and globally.

We extend our gratitude to the leadership of UNY, the leadership of the Faculty of Social and Political Sciences, and all those who have assisted in the completion of the curriculum draft for the Master's Program for the 2025 Academic Year. May Allah continue to bestow His mercy and guidance upon us all. Amen.

Study Program Coordinator,

Prof. Dr. Haryanto, M.Pd.

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## STUDY PROGRAM IDENTITY

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|---|---|---|
| Name of University | : | Yogyakarta State University |
| Status of Higher Education Institution | : | State University with Legal Entity (PTN-BH) |
| Faculty | : | Faculty of Education |
| Study Program Name | : | Master of Learning Technology |
| Establishment Permit | : | 176/O/2001 |
| Accreditation Rating | : | Excellent |
| Accreditation Certificate Number | : | 1197/SK/LAMDIK/Ak/M/XII/20 |
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# INTRODUCTION

## A. BACKGROUND

Vision occupies an important position in any institution, including higher education institutions. A clear, concise, dense, and memorable vision will have implications for improving the quality and performance of the institution as a whole, because it is able to drive and maintain the dynamics of work in one institutional breath to achieve the stated goals. Following this principle, the Master of Learning Technology (TP) Study Program of the Faculty of Education and (FIP) of Yogyakarta State University (UNY) has established a vision, namely the Scientific Vision of the Master of Learning Technology Study Program of TP FIP UNY, namely: "to become a master of learning technology study program that excels in the development of learning theories and practices, and is innovative in the application of technological concepts and principles in accordance with the development of information and communication technology based on piety, independence and scholarship."

To realize this vision, the Master of Education and Training Program (TP) at the Faculty of Social and Political Sciences (FIP) of Yogyakarta State University (YSU) carries out a mission within the Tri Dharma Perguruan Tinggi (Three Pillars of Higher Education), as detailed in the following section. This mission aims to produce graduates who are independent, pious, creative, innovative, and have a global perspective. One mechanism for this development is through a curriculum document that serves as the foundation for the learning process.

The curriculum is one of the most important components in an education system. Due to its strategic position, curriculum development is imperative, or a necessity, to keep pace with current developments. There are two crucial aspects that must be addressed when updating the curriculum: the academic aspect and the practical aspect. The academic aspect relates to the epistemology of the scientific field, which must adapt to current developments, and the practical aspect relates to the demands of the workplace. Therefore, curriculum evaluation in every study program, including the Master's Program in TP FIP UNY, is also imperative. There are two important aspects that form the basis for the evaluation and development of the Master's Program in TP FIP UNY's interdisciplinary curriculum: those related to societal developments and new policies within the national education system.

Educational technology as a discipline continues to evolve in line with societal changes. Even considering societal dynamics, educational technology is becoming more open to other disciplines. *Thus, educational technology is an interdisciplinary field, and its artifacts are used in a wide array of settings* (Molenda and Robinson, 2008: 245). Historically, the epistemology of the discipline of educational technology has also evolved, particularly in relation to the development of media and communication technology, as evidenced by the ever-evolving definition of educational technology. Therefore, as society continues to evolve, known as the current era of digital transformation, educational technology also continues to adapt, both as a theoretical study and in practice, to address learning problems and simultaneously seek solutions. As is well known, the world continues to move rapidly as society enters the era of digital transformation.

One of the determining factors in this fast-paced, complex, unpredictable, and difficult-to-predict world is the advancement of science and technology, particularly communications technology. As we all know, the rapid and massive development of digital technology has penetrated various aspects of life, bringing about profound and fundamental changes. Thanks to this development, the industrial world has also undergone a fundamental change known as the industrial transformation of the digital era. *IoT, artificial intelligence, robotics, big data* , and *blockchain* are the primary tools driving industrial society, replacing humans.

The world is now transforming from an *offline society* to an *online society* , with its various characteristics fundamentally changing. Several regions and countries are then competing to offer visions and concepts to welcome this era of digital transformation, such as Europe introducing the Industrial Revolution 4.0, Asia developing *smart cities , the PRC launching the Made in China 2025* vision , North America developing its core identity, namely the industrial internet, and then Japan launching *Society* 5.0. Indonesia, although it is not yet clear where it will take its position in welcoming this new era, must inevitably accept the reality that the arrival of the digital transformation era is an unavoidable fact (Wahyono, 2021).

The shock of the arrival of the digital transformation era has not yet subsided, now we are again shocked by the arrival of what is called the VUCA era, an acronym for *Volatility* , *Uncertainty* , *Complexity* , and *Ambiguity* . VUCA is a term first introduced by American business and leadership experts, Warren Bennis and Burt Nanus. VUCA itself is described as the current world situation full of rapid, unpredictable , difficult to control changes, and at the same time reality and truth have become very subjective. The

presence of VUCA further emphasizes that the world continues to move quickly, complex, unpredictable, fluctuating, and even turbulent.

From a practical perspective, as a result of social change in *online communities* in the current era of digital transformation, social roles and attributes are also undergoing changes. Numerous new types of jobs and professions are emerging one after another. The interdisciplinary field of Learning Technology has produced what are known as educational technologists. Therefore, continuous curriculum evaluation is necessary to prepare educational technologists with various competencies appropriate to the era of digital transformation.

It must be acknowledged that web-based education offers positive aspects, such as the opportunity for students to access knowledge globally, almost limitless. As long as students have the ability to learn independently, they can easily obtain various knowledge according to their interests and needs. Everything is neatly organized, readily available, and open for easy access. However, the independent learning ability of students in Indonesia remains a problem because it is still categorized as low. This low independent learning ability implies that the presence of new media by students is more likely to access recreational content than informative and educational content. Facts show that student involvement in the online learning process is more about *searching* than *reading* , due to low independent learning ability.

Even engaging in algorithmic learning processes through new media can stifle creativity and imagination. For example, when students are asked a question by a teacher or lecturer, they become a habitual Google *search* . This Google-dependent learning pattern prevents students from developing their imagination and severely weakens their knowledge retention. Such an algorithmic educational model also complicates evaluation, as everything is handled through Google's search engine. *Googling* has become part of students' learning culture in algorithmic education, making it difficult to measure their competency validly.

Based on this, the curriculum development of the Master of Learning Technology Study Program at the Faculty of Social and Political Sciences, Yogyakarta State University (FIP UNY) also considers both constructivist and critical paradigms. The constructivist paradigm is used to develop student competencies based on *facilitating and learning abilities.* Meanwhile, the critical paradigm is used to develop educational technology as an ethical practice that addresses issues of injustice in the learning process related to gender, race, disability, and interfaith prejudice or intolerance. Therefore, education based on the constructivist and critical paradigms will be

manifested in the form of courses taught to students to develop creative, innovative educational technology competencies that are simultaneously sensitive to social injustice.

The second factor that is taken into consideration in developing the curriculum of the Master of Learning Technology Study Program at FIP UNY is related to the dynamics of government policy. One important policy that is relevant to curriculum development is what is called *deep learning* or what is translated as In-depth Learning (PM). PM is defined as an approach that glorifies by emphasizing the creation of a learning atmosphere and a conscious, meaningful, and enjoyable learning process through holistic and integrated thought, heart, feeling, and sports training. The PM framework consists of four components, namely (1) graduate profile dimensions, (2) learning principles, (3) learning experiences, and (4) learning frameworks.

As a crucial document in developing the competency of the UNY Master of Instructional Technology Study Program, the curriculum development also refers to the new policy on PM. This is crucial to ensure a dynamic alignment with the current national education vision, which utilizes the PM approach. Therefore, the curriculum development of the UNY Master of Instructional Technology Study Program is an integral part of the effort to shape Indonesians with character aligned with the values of Pancasila. As a crucial document for the development of the nation's character, the curriculum development of the Master of Instructional Technology Study Program requires a philosophical, sociological, historical, psychological, and legal foundation.

## B. BASIS FOR CURRICULUM DEVELOPMENT

### 1. Philosophical Basis

Discussing and engaging in dialogue with philosophy means starting from a fundamental question about humanity. One such fundamental question is: what is the nature of humanity? Many schools of philosophy have continually attempted to answer this question. A positivist philosopher, Rene des Cartes, for example, responded by making an existentially grounded statement about humanity: *cogito ergo sum, "* I think, therefore I am." Therefore, for des Cartes and his supporters, who later became known as the Enlightenment movement, humans are essentially thinkers. It is clear here that thinking or ideas are the determining factor for human existence. This is what the Enlightenment movement, with its principle of anthropocentrism, later became the basis of the philosophy of logical positivism.

While medieval thought was heavily theological, with God as the center, what developed was a complete surrender to God and an acknowledgment that humans are essentially weak, powerless creatures. Everything was then explained through theological thinking. This conditioned religion's rapid growth, continuing to control human thoughts, attitudes, and socio-political actions. Therefore, truth and knowledge stem from religious scriptures, constructed as originating from heaven and commanded by God.

*Enlightenment* movement in Europe, which slowly but surely challenged theological thinking. This movement sought truth not from religious scriptures, but through direct observation of objects, known as empiricism. Thus, humans moved away from theological thinking and toward empiricism, which gave birth to the philosophy of positivism. Humans no longer positioned themselves as peripheral but as central, a phenomenon known as anthropocentrism. Humans emerged from nature and began to explain it using knowledge, namely mathematics, physics, chemistry, and biology, known as pure science, and later referred to as science.

Combined with Des Cartes's assumption that I think, therefore I am, science and technology developed rapidly in Europe. Scientific and technological discoveries occurred continuously and in succession, which then propelled European society from an agrarian society with a feudal mode of production to an industrial society with a capitalist mode of production. Therefore, the historical changes in science and technology must be acknowledged as being due to the development of positivism philosophy, characterized by, among other things, anthropocentrism, reliance on reason, and linear development.

Positivist philosophy then influenced the social sciences and pedagogy. The method of explanation based on natural law is singular, as is the scientific tradition used by social sciences pioneered by August Comte. The way of thinking using positivist philosophy also influenced pedagogy. The paradigms used have also begun to be more varied, meaning that they no longer only use the positivist paradigm, but there have been efforts to develop educational science with paradigms other than the positivist paradigm. One thing that differs from the previous era, in this era of reform, educational science has begun to pay attention to the constructivist paradigm. According to Denzin and Lincoln, the constructivist paradigm assumes a relativist ontology (there are many realities), a subjective epistemology (the knowing subject and the known object create understanding together), and a naturalistic methodological procedure (in the real/natural world). Scientific findings are ultimately presented based on the criteria of *grounded theory* or pattern theory (Denzin and Lincoln, 2010: 25). Since the attention to this constructivist

paradigm has begun to emerge, educational science has explored many themes that require a shift from *Teacher Centered Learning (TCL)* to *Student Centered Learning. (SCL).* This new development is already progress towards enriching the epistemology of education in Indonesia, because many studies and research have begun to be oriented towards placing students as active subjects.

However, the development of positivist philosophy led to an irony and paradox. While initially humans were positioned as subjects of nature, the implications of scientific and technological developments have instead positioned humans as objects of their own creation. This means that science and technology, as human creations, have become autonomous, dominating humans as their creators. This is what gave rise to criticism, namely the constructivist and critical paradigms.

The constructivist paradigm then developed in pedagogy, particularly that based on the philosophy of pragmatism. In principle, there is an overlap between pragmatism and constructivism, primarily in the assumption that humans are active subjects who carry out creative actions that are not controlled, or at least not overly controlled, by external factors.

Pragmatists assume: 1) Ultimate truth does not exist “out there” in the real world; it is “actively created as we act in and toward the world” (Hewitt, 1984: 4; Shalin, 1986; Ritzer, 2011: 596), 2) People remember and base their knowledge of the world on what has proven useful to them. They may change what no longer “works.”, 3) People define the social and physical material “objects” they encounter in the world according to their utility value to them. Ultimately, if we want to understand actors, we must base our understanding on what people actually do in the world.

The views of philosophical realism or social realism: 1) Societal determinism, where society underlies and controls individual mental processes, 2) Less belief that humans are free agents, but humans are more controlled by the larger community in their social behavior, 3) In contrast, the nominalist pragmatist view is, 4) Although there are macro-level structural phenomena, they do not have an “independent and determining effect on individual consciousness and behavior” (Lewis and Smith, 1980: 24), 5) Individuals are free agents who accept, reject, modify, or otherwise “define community norms, roles of beliefs, and so on, according to their own personal interests and current plans” (Lewis and Smith, 1980: 24).

The philosophical views of pragmatism, particularly Dewey's nominalism, have significantly influenced pedagogy. Several constructivist learning theories can be said to have philosophical roots in nominalist pragmatism, which refers to Dewey's views. When

pedagogues say that students are essentially active subjects who constantly act creatively in the learning process, the influence of their pragmatism philosophy is clearly felt. The fact that students are not controlled by teachers or other learning resources is one proof that nominalist pragmatism philosophy has a significant influence on pedagogy with a constructivist paradigm.

The paradigms used have also begun to be more varied, meaning they no longer rely solely on the positivistic paradigm, but there have been efforts to develop educational science with paradigms other than the positivistic one. One difference from the previous era is that in this reform era, educational science has begun to pay attention to the constructivist paradigm. According to Denzin and Lincoln, the constructivist paradigm presupposes a relativist ontology (there are many realities), a subjective epistemology (the knowing subject and the known object create understanding together), and a naturalistic methodological set of procedures (in the real/natural world). Scientific findings are ultimately presented based on the criteria of *grounded theory* or pattern theory (Denzin and Lincoln, 2010: 25). With the increasing attention to this constructivist paradigm, educational science has begun to explore themes that require a shift from TCL to SCL. This new development represents progress toward enriching educational epistemology in Indonesia, as many studies and research have begun to focus on positioning students as active subjects.

**2. Sociological Foundation**

Every educational process cannot be separated from the social context in which it is conducted. From a socio-cultural perspective, this implies that every educational process must dynamically and dialectically stem from the nation's socio-culture. If, for example, this nation has an agrarian-maritime culture, then a meaningful educational process must be part of an effort to develop the competencies formed and simultaneously shape an agrarian-maritime culture intelligently and creatively. Therefore, the main character of meaningful education is to teach thinking, not imitation; to teach creativity and productivity, not mere consumption; to chew, not swallow . In short, meaningful education produces *outcomes* that are critically conscious, liberating, and autonomous and empowered. Thus, it is an education that positions students as active subjects who think and create, not passive objects who merely imitate and consume. Meaningful education is a key pillar of a sovereign nation called Indonesia.

One of the main characteristics of a curriculum is that it is open and adapts to societal developments. Therefore, curriculum development takes into account the

dynamics of societal development. Societal change is an imperative or inevitability, so any concept that wishes to continue to exist must be open to all possibilities. Therefore, in the context of discussing curriculum development, we naturally address the development of contemporary, actual concepts, namely education in the digital era in an online society.

It must be acknowledged that web-based education offers positive aspects, such as the opportunity for students to access knowledge globally, almost limitless. As long as students have the ability to learn independently, they can easily obtain various knowledge according to their interests and needs. Everything is available and open to any access, neatly organized and easily accessible, therefore all are new media resources. However, the independent learning ability of students in Indonesia remains a problem because it is still categorized as low. This low independent learning ability implies that the presence of new media by students is more likely to access recreational content than informative and educational content. Facts show that student involvement in the online learning process is more about *searching* than *reading* , due to low independent learning ability.

Even engaging in algorithmic learning processes through new media can stifle creativity and imagination. For example, when students are asked a question by a teacher or lecturer, they become a habitual Google *search* . This Google-dependent learning pattern prevents students from developing their imagination and severely weakens their knowledge retention. Such an algorithmic educational model also complicates evaluation, as everything is handled through Google's search engine. Googling has become part of students' learning culture in algorithmic education, making it difficult to measure their competency validly.

Educational technology (ET) is an interdisciplinary field. As stated by Michel Molenda and Rhonda Robinson, in the book *Educational Technology: Definition and the Commentary* (in Molenda and Jannuszewski and Molenda (ed.), 2008: 245) asserts that *Thus, educational technology is such an interdisciplinary field and its artifacts are used in such a wide array of settings* (Thus, educational technology is an interdisciplinary field of study and its various products can be used in various places). Referring to Molenda and Robinson's assertion, educational technology requires contributions from various other disciplines such as psychology, communication science, and sociology.

The discipline of educational technology has also experienced an epistemological drought. In Indonesia, educational technology tends toward monodiscipline, as seen in several educational technology study programs at various universities. As an indicator, educational technology is still considered a didactic discipline, thus emphasizing

*Instructional Design* (ID) and *Instructional System Development* (ISD). Consequently, the dominant research typology is *Research and Development* (R&D). This indicates that educational technology in Indonesia still largely utilizes a positivist paradigm.

In fact, there has been a shift in attention in the discipline of educational technology from research using positivistic learning theory to constructivist learning theory. As emphasized by Januszewski and Molenda (2008: 2): *the research emphasis has shifted toward observing learners' active participation and constructing their own path toward learning. In other words, interest is moving away from the design of prespecified instructional routines and toward the design of environments to facilitate learning* (the emphasis of educational technology research has shifted toward observing learners' active participation and how they construct their own knowledge production in learning. In other words, the focus of educational technology research is moving from predetermined instructional design routines to designing environments that facilitate learning). Still in the context of the shift in attention to educational technology, Januszewski and Molenda (2008: 4) added: *The shift in views of learning* and instruction reflected in cognitive and constructivist learning theories has engendered a rethinking of assumptions about the connection between instruction and learning. So here instruction no longer controls learning, but instruction facilitates learning. Due to this shift, Januszewski and Molenda emphasize that: educational technology *claims to facilitate learning rather than to cause or control learning.*

Therefore, when educational technology has shifted its attention from *ID* to *facilitating learning* as a consequence of the influence of constructivist theories, the contribution of educational sociology has become increasingly significant. Here the role of educational sociology is seen in the mapping of constructivist paradigm theories such as the theory of social construction of reality by Peter Berger and Thomas Luckmann, the theory of the active subject by Weber, moral education by Emile Durkheim, the theory of symbolic interactionism by Herbert Mead and George Homans, and many others that place humans as active subjects.

Critical sociology can also enrich the epistemology of the TP discipline, which is indeed an interdisciplinary field. Educational technology is not only a study but also an ethical practice. As discussed in Januszewski and Molenda in chapter 11 on Professional Ethics and Educational Technology, the position and role of sociology are quite significant. In the book, Andrew Yeaman, Nicholls Eastmond, and Vicki S. Napper view and understand professional ethics broadly and deeply. They state: *the professional ethics of technologists first sociologically and historically, then by examining the current*

*situation, and finally in predicting areas of progress and growth* (Januszewski and Molenda, 2008: 284). Then they add that: *The sociological explorations illustrate what was going on beneath the surface and what is always going on* (Januszewski and Molenda, 2008: 290). Then the three authors also emphasize: *Do not expect consistency regarding results (consequentialism) or rights (deontology) because professional ethics is sociological.*

In Januszewski and Molenda's book, chapter 8, which discusses *Resources,* Anthony Karl Betrus explains that to meet professional standards, *appropriate resources* and learning material criteria must avoid content containing stereotypes about race, ethnicity, gender, and religion. Therefore, learning content containing such stereotypes is not only not an appropriate resource in the learning process but also unethical. As stated in AECT section 8, that: *learning material avoids content that promotes gender, ethnic, racial, or religious stereotypes* (in Januszewski and Molenda, 2008: 215). Thus, the contribution of educational sociology to educational technology is increasingly significant, including theories on gender, ethnocentrism, race, and religious prejudice such as intolerance. Meanwhile, critical pedagogy in the field of educational technology also finds its relevance.

**3. Psychological Basis**

The learning process, in particular, and the educational process in general, are always linked to students' behavior and mental development. Therefore, it is necessary to consider psychological disciplines that focus on human mental development and behavior. Based on this consideration, the curriculum development of the Master of Learning Technology Study Program at the Faculty of Social and Political Sciences, Yogyakarta State University (FIP UNY) requires a psychological foundation. In other words, a psychological approach to the learning process is imperative, therefore, it is necessary to utilize the assumptions of developmental psychology as the foundation of the curriculum.

One of the psychological theories that serves as a grand theory in pedagogy is Bloom's taxonomy, which encompasses three domains: cognitive, affective, and psychomotor. In pedagogy, these three domains are then used as the psychological foundation for developing student competencies. Therefore, the educational process must develop the cognitive domain, which deals with mental aspects, the affective domain, which relates to the development of emotional competencies, and then the psychomotor domain, which relates to skills competencies.

Based on this psychological foundation, the curriculum development of the Master of Learning Technology Study Program at the Faculty of Social and Political Sciences, Yogyakarta State University (FIP UNY) establishes three competencies related to mental development, attitudes and feelings, and skills in the field of learning technology. Therefore, an educational technologist must be competent in solving learning problems related to these three domains. These competencies also take into account the development of society, namely from an *offline society* to an *online society* . Therefore, this curriculum development also takes into account competency development covering the three domains of cognition, affect, and psychomotor, which are compatible with the era of digital transformation.

**4. Historical Basis**

Every discipline has its own epistemological history, and the discipline of Instructional Technology is no exception. Initially, the discipline of Educational Technology was associated with the tendency toward technological determinism. It must be acknowledged that currently, educational technology in Indonesia has a strong tendency to reduce technology to a *hard technology* rather than *a soft technology* , resulting in an overly deterministic approach to technology that constantly controls learning. However, in its recent development, the discipline of Educational Technology has shifted toward *soft technology* .

Initially, the TP discipline was more focused on understanding technology in the sense of *hard technology* , as a consequence of an understanding of technology that prioritized products. Some definitions referred to include Gilbraith (1967) who understood technology as: " *the systematic application of scientific or other organized knowledge to practical tasks* ." Also referring to Hooper and Rieber (1995), "Technology by definition, applies current knowledge for some useful purpose." Based on such references, it is not surprising that the TP discipline initially understood technology limited to interpretations that contained more of the understanding of technology as *hard technology* . As stated by Robert Maribe Branch and Christa Harrelson Deissler (2008), as follows:

" *Most common interpretations of technology focus on the physical products that result from technological research and development, such as computer hardware and software, video recordings, personal digital assistants, and other handheld communications devices, satellite, satellite receivers, and the like. Some people refer to this side of technology as hard technology, while reserving the term of soft technology to refer to the intellectual processes* " (in Januszewski and Moelenda, 2008: 196).

In fact, when TP is understood as a process, Branch and Deissler further explain that the TP discipline is now also starting to focus on *soft technology* , by saying: " *This chapter focuses on the soft technology side, applying intellectual processes to achieve educational goals. The venues of educational technology processes typically include teacher planning routines, instructional design operations, curriculum development projects, learning resources administration, and media utilization strategies* ." (in Januszewski and Moelenda, 2008: 197).

So, technology as a process, especially an intellectual process, is not just *hard technology* , but it must be understood that technology is also *soft technology* . This is where Branch and Deissler assert that: " *within this definition, the processes associated with educational technology are interpreted as the methods used to facilitate learning and improve performance* ." This argument is in accordance with the AECT assumptions: " *that education is a process, technology can facilitate educational processes, and intentional learning environments are complex. The following explanations of these assumptions provide a philosophical orientation to the study and practice of technological processes dedicated to education* (in Januszewski and Moelenda, 2008: 197).

For decades, the discipline of Educational Technology has been dominated by a view that strongly supports *Instructional Design (ID).* This dominance of the ID perspective has implications for the development of the discipline of Educational Technology, leading to the production of theories based on a positivist paradigm. Therefore, for approximately five decades, learning theories have predominantly referred to the positivist paradigm, placing technology and media as determining factors, while the learner remains passive. ID itself then seems to have become the primary characteristic of the discipline of Educational Technology and is even synonymous with Instructional Technology.

Such developments in the epistemology of Educational Technology also have implications for practices within the learning process, as manifested in the dominance of the *teacher-centered model.* Such practices have also become mainstream in the learning process in Indonesia, occurring in both formal, informal, and non-formal education. Teachers occupy a central position in the learning process and are consistently the primary source of knowledge, whose task is to transmit knowledge to learners. This situation is further strengthened by the socio-cultural view of Indonesian society, which has long viewed teachers as central, as the societal view that teachers are an acronym for digugu (following) and ditiru (imitating).

The teacher's central position is further justified when national education also refers to Ki Hadjar Dewantara's view: ing ngarsa sung tuladha, ing madya mangun karsa, tut wuri handayani. In these three spaces, it is clear that the teacher is at the forefront as a role model, in the middle as an initiative taker, and at the back, he follows but also controls the learner. Therefore, it is not surprising that educational and learning practices in Indonesia have so far been more teacher-centered or a teacher-centered model.

Although *teacher-centered learning* has advantages and disadvantages, one thing is clear: this model has implications for the underdevelopment of students' imagination and argumentative power. Several studies have shown several implications for the dominance of *teacher-centered learning* . Jumadi (2007) showed that teachers use power in the learning process, and found that in interactions between teachers and students, teachers show arrogance, control, and express it in various actions in high school classrooms. Meanwhile, Aman and Mustaffa (2006) found that in several schools in Malaysia, teacher power in the classroom can be identified in the following events: (1) when the teacher takes over the discourse; (2) what answers he wants; (3) how the teacher controls the topic; and (4) how the discourse structure should be interpreted.

Recognizing the shortcomings of the *teacher-centered learning model,* he then proposed another approach that was more oriented towards student involvement in the learning process, namely what later became popularly known as *student-centered learning* . Unlike *teacher-centered learning, in this student-centered learning* model , the learner is positioned as an active subject in the production of knowledge while engaged in the learning process. This new trend is also occurring in the discipline of educational technology, which is starting to shift from a dominance of *ID* to *facilitating learning.*

There has been a shift in attention in the discipline of educational technology from research using positivistic learning theory to constructivist learning theory. As emphasized by Januszewski and Molenda (2008: 2): *the research emphasis has shifted toward observing learners' active participation and constructing their own path toward learning. In other words, interest is moving away from the design of prespecified instructional routines and toward the design of environments to facilitate learning.* (The emphasis of educational technology research has shifted toward observing learners' active participation and how they construct their own knowledge production in learning. In other words, the focus of educational technology research is moving from predetermined instructional design routines to the design of environments that facilitate learning.) Still in the context of the shift in attention to educational technology, Januszewski and Molenda (2008: 4) added: *The shift in views of learning* and instruction

reflected in cognitive and constructivist learning theories has engendered a rethinking of assumptions about the connection between instruction and learning. So here instruction no longer controls learning, but instruction facilitates learning. Due to this shift, Januszewski and Molenda emphasize that: educational technology *claims to facilitate learning rather than to cause or control learning.*

The orientation and focus on student involvement in the learning process is also evident in various government policies, as evident in curriculum documents and changes in learning strategies. For example, in the last two decades, the 2013 Curriculum has been implemented, clearly positioning students as active subjects, based more on constructivist learning theory. Then, in the last three years, the Indonesian government implemented a new curriculum known as the Independent Curriculum, which encourages students to engage directly in the real world and conditions active learners in selecting subject matter and developing learning agendas. Similarly, in the selection of learning strategies and models, each educational unit is required to apply more constructivist learning models, such as thematic learning, *project-based learning,* cooperative learning, and problem-based learning. Then, in recent developments, the government introduced deep *learning,* which, although not a curriculum document, occupies a central position in the national education system, which also focuses on the subject matter of students.

There is a congruence between learning trends in the era of digital transformation and the shift in the discipline of Educational Technology. This is not only in the approach aspect from ID to learning facilitation, but also in the resource aspect. Namely, in the era of digital transformation, educational technology resources inevitably shift from *resources by design to resources by unitilization* . As Anthony Karl Betrus (2008) stated, it is *an exclusive definition vs. inclusive definition* . Regarding the debate on *resources by design vs. resources by untilization* , for example, this is clearly a debate between conservative and moderate educational technology circles. However, with the emergence of *digital resources in the digital era, the exclusive definition* camp lost its strong argument, because *resources by utilization* have become so abundant in the virtual world. This is not to mention the problem of ethical practices in creating, using, and managing *appropriate resources* to facilitate learning and improve performance. There are so many ethical problems in educational practice in Indonesia that, when viewed from the perspective of educational technology as an ethical practice, fall far short of the professional standards of educational technologists. Learning practices in schools, for example, are so chaotic today because they do not heed the principles of educational technology as an ethical practice. Furthermore, ethical educational practices, according

to Anthony K. Betrus, must meet political, social, and cultural expectations, including avoiding racist content, gender bias, insensitivity to people with disabilities, and intolerance. This demonstrates the strategic role of educational technology in Indonesia in developing quality human resources.

**5. Legal Basis**

The curriculum of the Master of Learning Technology study program within the Faculty of Educational Sciences was developed with reference to the following legal basis.

a. Law of the Republic of Indonesia Number 14 of 2005 concerning Teachers and Lecturers (State Gazette of the Republic of Indonesia 2005 Number 157, Supplement to the State Gazette of the Republic of Indonesia Number 4586);
b. Law of the Republic of Indonesia Number 12 of 2012 concerning Higher Education (State Gazette of the Republic of Indonesia 2012 Number 158, Supplement to the State Gazette of the Republic of Indonesia Number 5336);
c. Presidential Regulation of the Republic of Indonesia Number 8 of 2012, concerning the Indonesian National Qualifications Framework (KKNI);
d. Government Regulation Number 35 of 2022 concerning the Legal Entity Higher Education Institution of Yogyakarta State University;
e. Regulation of the Minister of Education and Culture of the Republic of Indonesia Number 73 of 2013, concerning the Implementation of the KKNI in the Higher Education Sector;
f. Regulation of the Minister of Education and Culture No. 7 of 2020 concerning the Establishment, Changes, Dissolution of State Universities, and the Establishment, Changes, and Revocation of Permits for Private Universities;
g. Regulation of the Minister of Education, Culture, Research, and Technology Number 6 of 2022 concerning Diplomas, Competency Certificates, Professional Certificates, Degrees, and Equivalency of Diplomas from Universities in Other Countries;
h. Regulation of the Minister of Education, Culture, Research, and Technology Number 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;
i. Regulation of the Minister of Education, Culture, Research, and Technology No. 53 of 2023, concerning Quality Assurance of Higher Education;

j. Decree of the Minister of Research, Technology, and Higher Education No. 123 of 2019 concerning Internships and Recognition of Industrial Internship Semester Credit Units for Undergraduate and Applied Undergraduate Programs;
k. UNY Chancellor Regulation Number 15 of 2023 concerning UNY Academic Regulations;
l. UNY Chancellor Regulation Number 4 of 2025 concerning the Curriculum Development Guidelines for Yogyakarta State University.

## C. VISION, MISSION, GOALS, AND STRATEGY OF THE UNIVERSITY AND FACULTY

### 1. Vision, Mission, Goals, and Targets of Yogyakarta State University Vision

To become a world-class educational university that is superior, creative, and sustainably innovative.

Mission

a. organizing superior, creative and innovative sustainable academic, vocational and professional education;
b. conducting research and development in the fields of science and technology, social humanities, sports-health, and arts and culture that are superior, creative, and innovative and sustainable;
c. organizing superior, creative and innovative community service activities that are sustainable for community empowerment and welfare;
d. organizing and building sustainable networks at national and international levels;
e. and organize transparent and accountable institutional governance, services and quality assurance.

Objective

a. produce graduates who are superior, creative, innovative, pious, independent and intellectual;
b. produce discoveries, developments and dissemination of science, technology, art and/or sports that improve the welfare of individuals and society, support regional and national development and contribute to solving global problems;
c. the implementation of community service and empowerment activities that encourage the development of human, community and natural potential to realize community welfare;
d. generate networks involving the community, academics, industry and media at national and international levels;

e. produce transparent and accountable university governance in the implementation of higher education autonomy.

Strategy

a. Producing graduates who are superior, creative, innovative, pious, independent and intellectual
b. Producing discoveries, developments and dissemination of science, technology, art and/or sports that improve the welfare of individuals and society, support regional and national development and contribute to solving global problems.

**2. Vision, Mission, Goals, and Targets of the Faculty of Education**

Vision

To become a Faculty that is superior, creative, and continuously innovative in enlightening educational science and psychology.

Mission

a. Organizing and managing education in the academic and professional fields for all educational paths and levels that require self-development of lecturers and encourage students to have basic individual values in acquiring knowledge, skills, attitudes in accordance with the basic values of Pancasila, and global competitiveness.
b. Organizing, managing, and disseminating research and development results that produce new discoveries in the fields of educational and non-educational sciences.
c. Organizing, managing, and disseminating community service activities that are oriented towards the results of studies and research for community empowerment and welfare.
d. Organizing and building networks with stakeholders at local, regional and international levels.
e. Organizing faculty governance with excellent service, transparent and accountable quality assurance.

Objective

a. Producing graduates who meet the learning outcomes set out in the graduate profile according to the standards of each study program.
b. Producing discoveries, developments, and dissemination in the fields of educational science and psychology that improve the welfare of individuals and society, support regional and national development, and contribute to solving global problems.

c. Organizing community service activities that are oriented towards the results of studies and research for the development of human potential, empowerment and community welfare.
d. Generating networks with stakeholders at local, regional and international levels.
e. Realizing faculty governance based on excellent service and accountable quality assurance and fast-moving management following current developments.

Strategy

a. Producing graduates who are superior, creative, and sustainably innovative in educational science and psychology.
b. Producing graduates who can discover, develop, apply, and disseminate the fields of educational science and psychology.

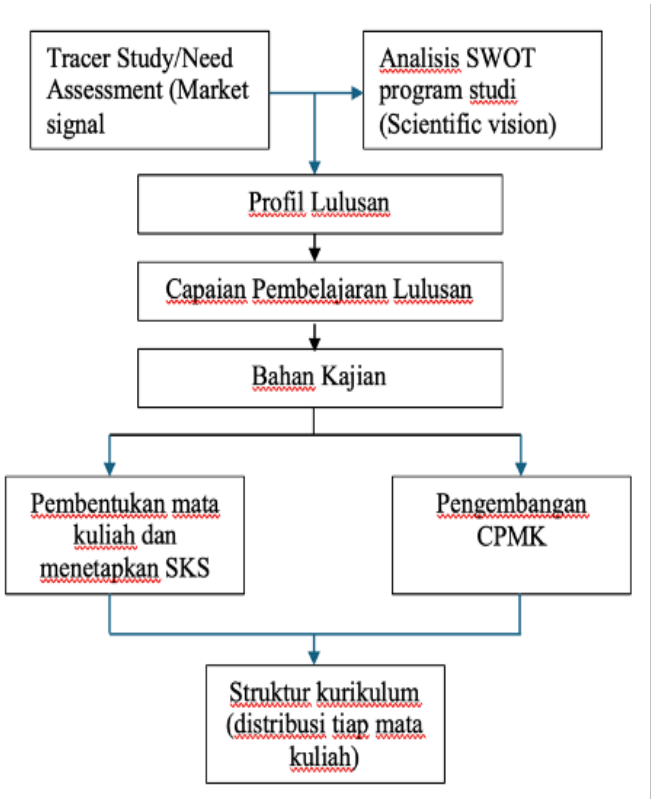
## B. CURRICULUM DEVELOPMENT STAGES

The curriculum development stages are systematically structured and based on the *Outcome-Based Education* (OBE) paradigm, which emphasizes learning outcomes as the primary measure of graduate quality. This process also refers to the latest policy in Ministerial Regulation No. 53 of 2023, which integrates aspects of attitudes, knowledge, and skills into a single learning outcome. The curriculum development scheme involves multifaceted evaluation and input from various parties, ensuring that the resulting curriculum is able to address the challenges of the times and the needs of stakeholders.

Initial activities included a needs analysis (market signal) through a tracer study, an evaluation of graduate learning outcomes (CPL), and input from graduate users, alumni, professional associations, and accreditation bodies. This analysis was complemented by a scientific vision study using a SWOT analysis of the study program and relevant developments in educational technology. The integration of these two approaches resulted in a graduate profile as the basis for the curriculum.

Subsequent stages were carried out sequentially, as illustrated in *Figure 1* below.

Figure 1. Stages of study program curriculum development
master of learning technology




**1. Tracer Study Analysis / Need Assessment (Market Signal)**

The initial curriculum development process begins with an analysis of the needs of external stakeholders, primarily through a tracer study of alumni to assess the achievement of graduate profiles and the relevance of the existing curriculum. A needs assessment of the workforce, industry, graduate users, and the community is conducted to capture signals about current and future competency needs. This information serves as a market signal that reflects the study program's relevance to the dynamics of the workforce and the direction of national development.

**2. SWOT Analysis of Study Programs (Scientific Vision)**

Simultaneously, the study program also conducts an internal-external analysis using the SWOT (Strengths, Weaknesses, Opportunities, Threats) approach to: Assess resource readiness, scientific strengthening, and collaboration potential. Develop a scientific vision for the study program that leads to updating the knowledge base of Educational Technology, both in the aspects of pedagogy, digital technology, learning media, and entrepreneurship.

**3. Determination of Graduate Profile**

The results of these two-pronged studies are used to develop a graduate profile, a representation of the roles graduates will play in society and the workplace. This profile includes their skill orientation, professional identity, and contribution to technology-based educational transformation.

**4. Formulation of Graduate Learning Outcomes (CPL)**

From the graduate profile, Graduate Learning Outcomes (CPL) are formulated, which are a concrete form of the student's final competencies. CPL integrates three main domains: (1) Attitude and values; (2) Knowledge; and (3) General and specific skills.

**5. Determination of Study Materials**

Each CPL point is described in study materials, namely scientific fields, strategic issues, and supporting scientific disciplines needed to form these competencies.

**6. Formation of Courses and Determination of Credits**

From these study materials, courses are developed that represent specific achievements and are applicable and contextual. The determination of the credit unit weight is adjusted to: (1) The complexity of the desired achievement; (2) The learning method used; and (3) Learning activities (lectures, practicals, projects, fieldwork).

**7. Development of Course Learning Outcomes (CPMK)**

After the course is formed, more operational and measurable CPMK (Course Learning Outcomes) are derived. CPMK is used as a basis for compiling: (1) Instructional objectives; (2) Learning strategies; and (3) Evaluation and assessment plans.

**8. Curriculum Structure Development**

The final stage is the preparation of the curriculum structure, namely the organization of courses into semesters and specific levels, taking into account: (1) Horizontal organization (the relationship between courses in one semester); (2) Vertical organization (grading based on complexity and prerequisites); and (3) Integration of

MBKM activities such as internships, teaching assistance, village projects, and others.

These stages constitute a curriculum development framework that is evidencebased, outcomes-oriented (CPL), and responsive to changing times. The resulting curriculum not only ensures academic quality but also ensures graduates' relevance to national and global needs.

## STUDY PROGRAM CURRICULUM
## MASTER OF LEARNING TECHNOLOGY

### A. RATIONAL

The Master of Learning Technology (TP) study program at the Faculty of Education (FIP) of Yogyakarta State University (UNY) is a leading study program focusing on the study of practical ethics in solving learning problems and improving performance through the optimal development, use, utilization, and management of learning processes and resources. This study program aims to produce practitioners, educators, analysts, and entrepreneurs in the field of educational technology. This study program also continues to strive to adapt to the developments and challenges of the industrial revolution 5.0 and the era of digital transformation in the world of education.

In line with global dynamics, societal needs, and national regulations in the field of education that emphasize the formulation of OBE ( *outcome-based education* ) learning outcomes, the development of the Master of Learning Technology study program curriculum in accordance with these trends is a necessity. The OBE-based curriculum demands the achievement of a concrete and measurable graduate profile in all domains of learning objectives according to the demands of the world of work, developments in science and technology, and societal needs. Therefore, the TP study program curriculum

needs to be updated to be more responsive to the needs of graduate users ( *user needs* ), in line with the Indonesian National Qualifications Framework (KKNI) and the National Standards for Higher Education (SNPT), and support the performance of higher education institutions.

Updating and/or developing the OBE-based Master of Learning Technology study program curriculum is expected to strengthen the competency dimensions of graduates who are adaptive, creative, innovative, and highly competitive at the national and international levels. This curriculum design should emphasize the accumulation of courses and focus on achieving learning through transformative, meaningful, and applicable learning experiences. Furthermore, this curriculum design opens up space for strategic collaboration with the workplace and industry, educational institutions, and professional communities relevant to the field of learning technology.

The curriculum is one of the most important components in an education system. Due to its strategic position, curriculum development is imperative, or a necessity, to keep pace with current developments. There are two crucial aspects that must be addressed when updating the curriculum: the academic aspect and the practical aspect. The academic aspect relates to the epistemology of the scientific field, which must adapt to current developments, and the practical aspect relates to the demands of the workplace. Therefore, curriculum evaluation in every study program, including the Master's Program in TP FIP UNY, is also imperative. There are two important aspects that form the basis for the evaluation and development of the Master's Program in TP FIP UNY's interdisciplinary curriculum: those related to societal developments and new policies within the national education system.

Educational technology as a discipline continues to evolve in line with societal changes. Even considering societal dynamics, educational technology is becoming more open to other disciplines. *Thus, educational technology is an interdisciplinary field, and its artifacts are used in a wide array of settings* (Molenda and Robinson, 2008: 245). Historically, the epistemology of the discipline of educational technology has also evolved, particularly in relation to the development of media and communication technology, as evidenced by the ever-changing definition of educational technology.
Therefore, as society continues to evolve, known as the current era of digital transformation, educational technology also continues to adapt, both as a theoretical study and in practice, to address learning problems and simultaneously seek solutions. As is well known, the world continues to move rapidly as society enters the era of digital transformation.

One of the determining factors in this fast-paced, complex, unpredictable, and difficult-to-predict world is the advancement of science and technology, particularly communications technology. As we all know, the rapid and massive development of digital technology has penetrated various aspects of life, bringing about profound and fundamental changes. Thanks to this development, the industrial world has also undergone a fundamental change known as the industrial transformation of the digital era. *IoT, artificial intelligence, robotics, big data* , and *blockchain* are the primary tools driving industrial society, replacing humans.

The world is now transforming from an *offline society* to an *online society* , with its various characteristics fundamentally changing. Several regions and countries are then competing to offer visions and concepts to welcome this era of digital transformation, such as Europe introducing the Industrial Revolution 4.0, Asia developing *smart cities , the PRC launching the Made in China 2025* vision , North America developing its core identity, namely the industrial internet, and then Japan launching *Society* 5.0. Indonesia, although it is not yet clear where it will take its position in welcoming this new era, must inevitably accept the reality that the arrival of the digital transformation era is an unavoidable fact (Wahyono, 2021).

The shock of the arrival of the digital transformation era has not yet subsided, now we are again shocked by the arrival of what is called the VUCA era, an acronym for *Volatility* , *Uncertainty* , *Complexity* , and *Ambiguity* . VUCA is a term first introduced by American business and leadership experts, Warren Bennis and Burt Nanus. VUCA itself is described as the current world situation full of rapid, unpredictable, difficult to control changes, and at the same time reality and truth have become very subjective. The presence of VUCA further emphasizes that the world continues to move quickly, complex, unpredictable, fluctuating, and even turbulent.

From a practical perspective, as a result of social change in *online communities* in the current era of digital transformation, social roles and attributes are also undergoing changes. Numerous new types of jobs and professions are emerging one after another. The interdisciplinary field of Learning Technology has produced what are known as educational technologists. Therefore, continuous curriculum evaluation is necessary to prepare educational technologists with various competencies appropriate to the era of digital transformation.

Ultimately, the curriculum design for this OBE-based program must align with UNY's vision as a world-class educational university that excels, is creative, and sustainably innovative. Therefore, the Master of Learning Technology program

curriculum maintains academic quality, is relevant to the needs of its graduates and users, and actively contributes to the development of a national education system based on inclusive, effective, and sustainable digital transformation.

## B. EVALUATION AND TRACER STUDY

The curriculum is one of the most important components of an education system. Due to its strategic position, curriculum development is imperative, or a necessity, to keep pace with current developments. There are two crucial aspects to consider when updating a curriculum: the academic aspect and the practical aspect. The academic aspect relates to the epistemology of the scientific field, which must adapt to current developments, and the practical aspect relates to the demands of the workplace. Therefore, curriculum evaluation in every study program, including study programs, is also imperative.

After conducting a tracer study to gather various needs and input from alumni of the UNY Postgraduate Learning Technology program, several pieces of information and data were identified as relevant for curriculum evaluation. The collected information and data can be identified as follows:

### 1. Curriculum Evaluation and *Tracer Study Results*

The curriculum was developed with input from various community elements and *tracer studies* . Table 1 shows a summary of the results of the curriculum evaluation and *tracer studies* .

Table 1. Summary of Curriculum Evaluation and *Tracer Study Results*

| **Input Content** | **Level of Importance** (v) | | | | | **Accepted** (v) | |
|---|---|---|---|---|---|---|---|
| | **5** | **4** | **3** | **2** | **1** | **Yes** | **No** |
| A. Input and Needs from the Community | | | | | | | |
| The curriculum should be able to foster students' learning independence. | √ | | | | | √ | |
| B. Input and Needs from the World of Work/Industry | | | | | | | |
| The Master of Learning Technology curriculum should also equip students with skills in the field of learning design. | √ | | | | | √ | |

| | | | |
|---|---|---|---|
| C. Input and Needs from Alumni | | | |
| 1. Increase the number of credits for TP practice and technological innovation in the curriculum. | | √ | √ |
| 2. Strengthen competencies regarding *data mining advance analysis* of the training field | | √ | √ |
| 3. The lecture process should develop students' English language skills. | | √ | √ |
| D. Input and Needs from Graduate Users | | | |
| 1. The curriculum needs to strengthen students' collaboration and communication skills in completing assignments (work). | √ | | √ |
| 2. The curriculum needs to strengthen students' soft skills. | √ | | √ |
| E. Input from Advisory Board and the like) | | | |
| 1. The Master of Learning Technology curriculum should provide matriculation courses that are mandatory for students whose undergraduate program (S1) is not linear. | √ | | √ |
| 2. Curriculum implementation needs to adapt to digital technology-based technological developments. | √ | | √ |
| F. Input and Needs from the Government (Legal Regulations) | | | |
| 1. Determination of learning outcomes is formulated by integrating attitudes, knowledge, and skills (Minister of Education, Culture, Research, and Technology Regulation No. 53 of 2023). | √ | | √ |
| 2. The study program curriculum is formulated by taking into account the KKNI level (Minister of Education, Culture, Research and Technology Regulation No. 53 of 2023). | √ | | √ |

| | | |
|---|---|---|
| G. Input from the Accreditation Body | | |
| The core curriculum of the study program should refer to the Association of Indonesian Educational Technology Study Programs | √ | √ |
| H. Input and Needs from the Department | | |
| It is hoped that in semester 3 students will be free from theory and focus on writing their thesis, so that students can graduate on time. | √ | √ |
| I. Input and Needs from the Faculty | | |
| 1. The study program curriculum must include a faculty-level scientific foundation curriculum of (7 credits). | √ | √ |
| 2. The Masters Program (S2) curriculum must be *in line* with the Bachelor's Program (S1) curriculum. | √ | √ |
| J. Input and Needs from Universities | | |
| 1. The Master's Program curriculum is designed by considering: a). Generic KKNI Level 8; b). Continuity of *learning outcome levels* for Bachelor's, Master's, and Doctoral degrees; c). Continuity of learning material levels for Bachelor's, Master's, and Doctoral degrees. | √ | √ |
| 2. The Master's Final Project can be in the form of a Thesis, Prototype, Project or other similar form of final project with a weight of 10 credits. | √ | √ |
| 3. The Masters Program can determine prerequisite courses (matriculation) for Masters students across fields of study that are not linear with the study program. | √ | √ |

Description: 5 = very important, 4 = important, 3 = quite important, 2 = not important, 1 = very not important

## 2. Formulation of Changes to the Study Program Curriculum

Based on the results of the curriculum evaluation and *tracer study* , improvements will be made in the preparation of the next curriculum.

Table 2. Dimensions of Change in the Results of Curriculum Evaluation and *Tracer Study*

| Aspects of Change | 2020 Curriculum | Curriculum 2025 |
|---|---|---|
| 1. Graduate Learning Outcomes | Presented in detail including attitudes, knowledge, specific skills, and general skills (based on Permendikbud No. 3 of 2020) | Presented in an integrated manner as a whole integrated competency encompassing attitudes, knowledge, specific skills, general skills (based on Permendikbudristek No. 53 of 2023) |
| 2. Curriculum Structure | The curriculum structure for semester 3 includes 4 credits of elective courses. | The curriculum structure for semester 3 is no longer theory-based. Elective courses are moved to semester 2. |
| 3. Course names to accommodate APSTPI core course requirements | E-learning development | Development of distance learning and e-learning |
| 4. Final Assignment Course Weight | The final task for completing a Master's study is a thesis. Thesis course weight 6 credits | The final assignment for completing a Master's study can be in the form of a thesis, prototype, project or other similar form of final assignment with a weight of 10 credits. |
| 5. Mode of lecture implementation | The lecture implementation mode emphasizes offline face-to-face meetings. | The lecture implementation mode emphasizes *hybrid learning* both offline and online (accommodating developments in digital technology). |

The table above provides a detailed overview of the changes that occurred and were accommodated in the new curriculum, based on input from the previous curriculum evaluation. The curriculum change process is a continuous process based on the results of the previous curriculum evaluation. Therefore, curriculum change is a process of continuous improvement based on the evaluation of previous and current conditions.

Table 3. Curriculum Equivalence

| No | 2020 Curriculum | | Curriculum 2025 | |
|---|---|---|---|---|
| | Course Code | Course Name | Course Code | Course Name |
| 1 | PPS8201 | Philosophy of Science | PPS80201 | Philosophy of Science |

| | | | | |
|---|---|---|---|---|
| 2 | PPS8302 | Educational Research Methodology | PPS80302 | Educational Research Methodology |
| 3 | PPS8203 | Statistics | PPS80203 | Statistics |
| 4 | TPB8201 | Learning Theory | TPM80201 | Learning Theory |
| 5 | TPB8202 | Performance Enhancement Technology | TPM80202 | Performance Enhancement Technology |
| 6 | TPB8303 | Learning Multimedia | TPM80303 | Learning Multimedia |
| 7 | TPB8204 | Learning Evaluation | TPM80204 | Learning Evaluation |
| 8 | TPB8205 | Curriculum Development | TPM80205 | Curriculum Development |
| 9 | TPB8206 | Learning Technology Practice | TPM80206 | Learning Technology Practice |
| 10 | TPB8307 | E-learning development | TPM80307 | Development of distance learning and e-learning |
| 11 | TPB8208 | Learning Design | TPM80208 | Learning Design |
| 12 | TPB8309 | Thesis Proposal | TPM80309 | Thesis Proposal |
| 13 | TPB8210 | Writing Scientific Papers | TPM80210 | Writing Scientific Papers |
| 14 | TPB8611 | Thesis | TPM81011 | Master's Final Project |
| 15 | TPB8215 | Training Program Management | TPM80212 | Training Program Management |
| 16 | TPB8216 | Digital Learning Resources | TPM80213 | Digital Learning Resources |
| 17 | TPB8217 | Independent Learning | TPM80214 | Independent Learning |
| 18 | TPB8218 | Development of Printed Teaching Materials | TPM80215 | Development of Printed Teaching Materials |
| 19 | TPB8219 | Development of Audio Visual Teaching Materials | TPM80216 | Development of Audio Visual Teaching Materials |
| 20 | TPB8220 | Learning Evaluation | TPM80217 | Learning Evaluation |
| 21 | TPB6201 | Learning Message Design | TPM80218 | Learning Message Design |
| 22 | TPB6202 | Basics of Educational Technology | TPM80219 | Foundation of Educational Technology |

## C. VISION, MISSION, AND EDUCATIONAL OBJECTIVES OF THE STUDY PROGRAM

### 1. Study Program's Scientific Vision

The scientific vision of the Master of Learning Technology study program is the study program's ideal in studying and developing science so that it achieves excellence and has characteristics of the study program's field of expertise to respond to the development of science and technology and its application in the benefit of society for the sake of improving the quality of life of the people in it, both individually and collectively (Attachment 12 of the Regulation of the National Accreditation Board for Higher Education Number 2 of 2022). As a guide to determining the study program's vision, 4

aspects can be considered: (1) the accuracy and uniqueness of the study program's scientific field (2) future-oriented, (3) alignment with the institution's vision, and (4) community needs.

The vision of the Master of Learning Technology Study Program, FIP UNY is formulated as "to become a master of learning technology study program that excels in the development of learning theory and practice, the application of technological concepts and principles in accordance with the development of information and communication technology in a creative and innovative manner that is sustainable."

The vision of the Master of Learning Technology Study Program aligns with the vision of the university and faculty, which emphasize excellence, creativity, and sustainable innovation. The vision of the Master of Learning Technology Study Program serves as a reference in formulating the mission of the Master of Learning Technology Study Program.

**2. Study Program Mission**

The Mission of the Master of Educational Technology Study Program is an effort that must be implemented by the study program according to its functions and duties to realize the established vision. The mission of the Master of Educational Technology study program is formulated by considering that it is derived from the vision of the study program in line with the Vision and Mission of the Higher Education Institution and the Vision and Mission of the Faculty. The mission of the Master of Educational Technology Study Program, FIP UNY is formulated by considering at least the tridharma, so that it includes missions in the implementation of education, research, and community service, as well as other missions that support the implementation of the 3 tridharma such as governance, cooperation, and others.

The mission of the UNY Learning Technology Masters Study Program is:

a. Providing quality education to produce Educational Technologists who are pious, independent, and able to create, utilize and manage appropriate technological resources and processes to facilitate learning and improve performance.
b. Conducting innovative research in the development of information and communication technology-based learning theories and practices
c. Implementing information and communication technology-based learning theory and practice
d. Participate actively and innovatively in community service activities to help solve educational and learning problems through the use of information and communication technology.

### 3. **Objectives** of the Master of Learning Technology Study Program

a. Formulation of Study Program Educational Objectives (TPP)

*The Program Educational* Objective (TPP) describes the career and professional achievements prepared by the study program that are important for graduates of the Master of Learning Technology Study Program. The formulation of the TPP for the Master of Learning Technology Study Program considers alignment with the vision of the university, the vision of the faculty, and the scientific vision of the study program. The formulation of the study program objectives **for the Master of Learning Technology Study Program at UNY is:**

TPP 1 : producing graduates who are superior, competitive, and able to adapt to the world of work and contribute to improving the learning system.

TPP 2 : producing graduates who are able to improve the quality of education through the development of sustainable learning technology.

TPP 3 : produces graduates who are able to manage research, development, and application of science and technology in the field of Educational Technology.

TPP 4 : produces graduates who have leadership attitudes and responsibility to solve learning problems in an innovative and tested manner.

b. Alignment of Study Program Educational Objectives with the Vision of the College, Faculty, and Study Program

To ensure coherence between the TPP and the vision of the university, the faculty, and the study program are explained narratively, combined with a matrix or conformity table. The following table illustrates the alignment between the TPP and the vision of the university, faculty, and study program.

Table 4. Matrix of Compliance of TPP with the Vision of Higher Education Institutions, Faculties, and Study Programs

| TPP | UNY Vision | | | Vision of the Faculty of Education | | | Study Program's Scientific Vision | | |
|---|---|---|---|---|---|---|---|---|---|
| | Superior | creative | Sustainable Innovation | superior | creative | Sustainable Innovation | Superior | Creative | Sustainable Innovation |
| TPP 1 | v | | | v | | | v | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| TPP 2 | | v | v | | v | v | | v | v |
| TPP 3 | | v | v | | v | v | | v | v |
| TPP 4 | | | V | | | V | | | v |

c. Alignment of Study Program Educational Objectives with the Indonesian National Qualifications Framework (KKNI)

To ensure the fulfillment of the competency level requirements set out in the Indonesian National Qualifications Framework (KKNI), the Master's Program in Learning Technology (TPP) must meet the KKNI level, which is level 8 for Masters. The following is a confirmation of the conformity between the educational objectives of the Master's Program in Learning Technology (TPP) and the KKNI level 8 descriptors.

Table 5. Compliance of TPP with KKNI

| **Descriptor KKNI Level 8** | TPP | | | |
|---|---|---|---|---|
| | TPP1 | TPP2 | TPP3 | TPP4 |
| • Able to contribute to the updating of science and technology | V | V | V | V |
| • Able to design, implement and control systems and processes for engineering purposes | | | V | |
| • Able to conduct scientific research or experimental research independently | | V | V | V |
| • Able to develop knowledge, technology and art | | V | | |
| • Able to solve problems in science, technology and art | | | | V |
| • Able to manage research and development that is beneficial to society and science | | | V | |

**4. Strategy :**

The strategy implemented by the Master of Learning Technology study program at FIP UNY to achieve the set goals is carried out by;

a. Producing TP graduates who are superior, creative, and innovative in sustainable digital technology-based learning technology.
b. Producing graduates who can discover, develop, apply and disseminate the field of learning technology science

## D. GRADUATE PROFILE

### 1. Graduate Profile and Profile Description

The graduate profile that characterizes graduates in a particular field of expertise or work field after completing studies in the Master of Learning Technology, FIP UNY is determined based on the results of a study of the needs of the world of work and strategic human resources required by the government and the business world and industry, as well as the needs in developing science and technology. The graduate profile of the Master of Learning Technology study program is compiled based on the agreement of similar study program groups (prodi), which can be accepted and used as a national reference. The formulation of the graduate profile of the Master of Learning Technology Study Program, FIP UNY, along with its description, is presented in table 6.

Table 6. Profile and description of graduates of the Master of Learning Technology Study Program

| | |
|---|---|
| Educational Technology Developer | Educational technology developers who are able to design, develop, and evaluate face-to-face and online learning programs, as well as print and digital technology-based learning resources creatively, innovatively, and responsibly according to the objectives, characteristics of the material and the learning participants. |
| Academics (Educators) | Educators who are critical, creative, and responsible and are able to facilitate and improve the performance of learning participants using technology-based learning processes and resources in accordance with the objectives, characteristics of the material and learning participants. |
| Education consultant | Educational technology experts who are able to provide services and recommendations for solving learning, teaching and educational problems. |
| Instructional Leader ( *School Instructional Designer* ) | Professionals in the field of education who are able to design, manage, implement, and evaluate learning resources and learning technology in the school environment, and are able to collaborate with teachers and teaching staff to improve instructional effectiveness and the use of technology in learning. |
| Developer of education and training programs | Experts who are able to develop creative and innovative sustainable training programs, implement them effectively, and evaluate them responsibly. |

### 2. Compliance of Graduate Profile with Study Program Educational Objectives

To ensure the suitability between the graduate profile of the Master of Learning Technology Study Program, FIP UNY, and the educational objectives of the study

program, this can be done through a matrix or table of suitability of the graduate profile with the TPP presented in table 5 below.

Table 7. Suitability of Graduate Profiles with the Educational Objectives of the Masters Program in Educational Technology, Faculty of IP, UNY

| Graduate profile | TPP 1 | TPP 2 | TPP 3 | TPP 4 |
|---|---|---|---|---|
| Educational Technology Developer | V | V | V | |
| Academics (Educators) | | V | V | |
| Education consultant | V | | | V |
| Instructional Leader | | V | V | |
| Education and training program (diklat) manager | | V | | |

## E. GRADUATES LEARNING OUTCOMES

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

Graduate Learning Outcomes, hereinafter abbreviated as CPL, is a formulation of graduate competency standards, namely the minimum criteria regarding the unity of attitude, skill, and knowledge competencies that indicate student achievement from their learning outcomes at the end of the higher education program (Minister of Education, Culture, Research, and Technology Regulation Number 53 of 2023). The determination of CPL is formulated by integrating the values of attitude, knowledge, and skills that indicate student achievement from their learning outcomes at the end of the higher education program.

The CPL is designed to prepare students to become members of society who are faithful, pious, and have noble morals, with character in accordance with the values of Pancasila, capable and independent in applying, developing, and discovering science and technology that benefits society, and actively developing their potential. The CPL for each study program encompasses competencies that include:

a. mastery of science and technology, specific skills/expertise and their application to 1 (one) or a group of specific scientific fields;
b. general skills required as a basis for mastering science and technology and relevant fields of work;
c. knowledge and skills needed for the world of work and/or to continue 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 CPL formulation refers to the KKNI qualification level, namely level 8. The CPL is clearly formulated, observable, measurable, and achievable in the learning process, and its achievement can be demonstrated and assessed. Each CPL item contains abilities ( *behavior/cognitive processes* ) and study materials ( *subject matters* ), and can be added to the context ( *Tyler* , 2013; Anderson & Krathwohl, 2001).

Table 8. CPL for the Master of Learning Technology Study Program

| No | CPL Description |
|---|---|
| CPL 1 | Able to analyze needs, design, develop, implement and evaluate innovative educational technology to improve the learning process. |
| CPL 2 | Able to develop, integrate and manage various interesting platforms, relevant projects to create effective and effective learning and performance improvement experiences. |
| CPL 3 | Able to understand learning theory and practice. |
| CPL 4 | Able to develop and implement various learning models to improve inclusive performance according to the needs and characteristics of students. |
| CPL 5 | Able to carry out research and community service based on the paradigm of educational technology. |
| CPL 6 | Able to provide appropriate solutions and recommendations in overcoming problems in the world of education. |
| CPL 7 | Able to maintain professional integrity and keep up with the latest developments in the field of education. |
| CPL 8 | Have effective leadership skills in managing educational resources. |
| CPL 9 | Able to build an effective learning organization. |

Based on the matrix or table 6 of the conformity between CPL and TPP above, it can be seen that all TPPs of the Master of Learning Technology FIP UNY have been outlined in the CPL so that all CPLs support the achievement of TPP, and there are no CPLs outside the TPP.

## 2. CPL Structure

Table 9. Identification of CPL Structure based on Ability, Study Material, and Context

| CPL | CPL Statement | Ability (Behavior) | Study Material (Subject) Matter) | Context |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| **CPL-1** | Able to analyze needs, design, develop, implement and evaluate innovative educational technology to improve the quality of the learning process. | Able to analyze, design, develop and implement | Learning Theory, Learning Message Design, Learning Design, Learning Evaluation, Educational Technology Practice, independent learning. | In formal, non-formal, and informal educational environments, both in government and private institutions, with the support of digital infrastructure and the diversity of student characteristics, as well as the demands for innovation in the era of digital transformation. |
| **CPL-2** | Able to develop, integrate and manage various interesting platforms, relevant projects to create effective and effective learning and performance improvement experiences. | Develop, use and evaluate | Multimedia Learning, Development of Distance Education and E-Learning, Performance Improvement Technology, Digital Learning Resource Development, Printed Learning Material Development, Audio Visual Learning Material Development, independent learning, Evaluation of learning media | These capabilities are applied in the development and implementation of technology-based learning programs in educational, training, or organizational environments, which require the integration of digital platforms and the management of educational projects in a collaborative and innovative manner. |
| **CPL-3** | Able to understand learning theory and practice. | Understanding learning theory and practice | Philosophy of Educational Technology Science, Curriculum Development, Learning Theory, Learning Design, Performance Improvement Technology, Education and Training Program Management | This ability is applied in various learning situations, both formal, non-formal and informal, which require an understanding of learning theory and its application in learning practices that are appropriate to the characteristics of students and the learning environment. |
| **CPL-4** | Able to develop and implement various learning models to improve inclusive performance according to the needs and characteristics of students. | Develop and implement various models | Philosophy of Educational Technology Science, Curriculum Development, Learning Theory, Instructional Design, Educational Technology Practice, Independent Learning | These capabilities are applied in various inclusive learning environments, both faceto-face and digital, taking into account the diversity of needs, potential, and backgrounds of learners to increase effectiveness and fairness in the learning process. |

| | | | | |
|---|---|---|---|---|
| **CPL-5** | Able to carry out research and community service based on the paradigm of educational technology. | Designing and delivering learning materials | Multivariate Statistics, Learning Theory, Educational Technology Research Methodology, Learning Message Design, Learning Design, Learning Technology Practice, Thesis Proposal, Master's Final Project | This capability is applied in research and community service activities based on an educational technology approach, both in academic and community environments, with a focus on solving learning problems and improving the quality of education through innovation. |
| **CPL-6** | Able to provide appropriate solutions and recommendations in overcoming problems in the world of education. | Analyze the problem | Philosophy of Educational Technology Science, Curriculum Development, Learning Theory, Educational Technology Research | This capability is applied in solving various educational problems in educational institutions, communities, and society, by considering policy dynamics, field needs, as well as |
| | | | Methodology, Learning Design, Learning Evaluation, Thesis Proposal, Master's Final Project, Learning Media Evaluation, Educational Technology Practice | technological advances and stakeholder characteristics. |
| **CPL-7** | Able to maintain professional integrity and keep up with the latest developments in the field of education. | designing, implementing and evaluating programs | Curriculum Development, Learning Theory, Learning Evaluation, Performance Technology, Education and Training Program Management | This ability is applied in professional practice in various educational institutions that demand ethics, responsibility, and continuous knowledge updates to answer the challenges and dynamics of the world of education. |
| **CPL 8** | Have effective leadership skills in managing educational resources. | Implementing effective leadership | Curriculum Development, Learning Theory, Digital Learning Resources, Distance Education and ELearning Development, Learning Multimedia. | This ability is applied in the management of educational programs or institutions at various levels and types of education, which requires effective leadership in organizing resources strategically, efficiently, and oriented towards quality. |

| | | | | |
|---|---|---|---|---|
| **CPL-9** | Able to build an effective learning organization. | Developing a vision and strategy | Philosophy of Educational Technology Science, Curriculum Development, Learning Design, Development of Distance Education and E-Learning, Master's Final Project. | This capability is applied in the development of learning organizations in educational institutions, training, or learning communities, which require structures, cultures, and learning systems that are adaptive, collaborative, and oriented towards continuous quality improvement. |

### 3. Alignment of Graduate Learning Outcomes with Objectives

The CPL is a breakdown of the TPP, so it's important to ensure that all TPPs are distributed within the CPL. Conversely, all CPLs are linked to the TPP, ensuring that no CPLs exist outside the TPP. The following table summarizes the alignment between the CPL and the TPP.

Table 10. Compliance between CPL and TPP

| Graduate Learning Outcomes (CPL) | | TPP 1 | TPP 2 | TPP 3 | TPP 4 |
|---|---|---|---|---|---|
| CPL-1 | Able to analyze needs, design, develop, implement and evaluate innovative | | | V | |
| | educational technology to improve the quality of the learning process. | | | | |
| CPL 2 | Able to develop, integrate and manage various interesting platforms, relevant projects to create effective and effective learning and performance improvement experiences. | | | | V |
| CPL 3 | Able to understand learning theory and practice. | | V | V | |
| CPL 4 | Able to develop and implement various learning models to improve inclusive performance according to the needs and characteristics of students. | V | V | | |
| CPL 5 | Able to carry out research and community service based on the paradigm of educational technology. | | | V | |
| CPL 6 | Able to provide appropriate solutions and recommendations in overcoming problems in the world of education. | | | V | |
| CPL 7 | Able to maintain professional integrity and keep up with the latest developments in the field of education. | | | V | |
| CPL 8 | Have effective leadership skills in managing educational resources. | | | V | |

| | | | | | |
|---|---|---|---|---|---|
| CPL 9 | Able to build an effective learning organization. | | | | V |

**4. Alignment of Graduate Learning Outcomes with Graduate Profiles**

The following table shows the suitability between Graduate Learning Outcomes and graduate profiles.

Table 11. Table of Conformity between Graduate Learning Outcomes and Graduate Profiles

| Graduate Profile | CPL 1 | CPL 2 | CPL 3 | CPL 4 | CPL 5 | CPL 6 | CPL 7 | CPL 8 | CPL 9 |
|---|---|---|---|---|---|---|---|---|---|
| Educational Technology Developer | V | V | V | V | V | | | | |
| Academics (Educators) | V | V | V | V | V | | | | |
| Education consultant | | | | | | V | V | | |
| Instructional Leader | | | | | | | | V | V |
| Education and training program (diklat) manager | | V | | V | | | | V | V |

**5. Alignment of Graduate Learning Outcomes with Specific Standards**

Certain institutions, such as international accreditation bodies, sometimes require that specific standards be met. For example, ASIIN, as an international accreditation body, requires that *Subject Specific Criteria (SSC) be met* (see ASIIN *Subject-Specific Criteria* (SSC) 01-Bachelor degree programs ). This requires ensuring that the CPL matches the SSC.

**F. STUDY MATERIALS AND FORMATION OF COURSES**

Each study program's CPL (Curriculum for Learning) item contains the study materials that will be used to develop the course. This study material can be one or more branches of science and their sub-disciplines, or a group of knowledge that has been integrated into a new body of knowledge agreed upon by a forum of similar study programs as a characteristic of that particular field of study. The study material is then further elaborated into learning materials. The breadth and depth of the learning materials refer to the CPL listed in SNDikti.

Study materials and learning materials can be updated or developed in accordance with developments in science and technology and the direction of the study program's scientific development. The process of determining study materials should involve the scientific field groups/laboratories within the study program. Developing a course based

on the selected study materials can begin by creating a matrix between the CPL formulation and the study materials to ensure their relevance (see Table 9).

Table 1 2. Conformity of Graduate Learning Outcomes and Study Materials

| No | Study Materials | Graduate Learning Outcomes (CPL) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | Philosophy of Science | | | v | v | | v | | | v |
| 2 | Statistics | | | | | v | | | | |
| 3 | Learning Theory | v | | v | v | v | v | v | v | |
| 4 | Educational Research Methodology | | | | | v | v | | | |
| 5 | Learning Design | v | | v | v | v | v | | | v |
| 6 | Learning Multimedia | | v | | | | | | v | |
| 7 | Development of Distance Education and E-Learning | | v | | | | | | v | v |
| 8 | Learning Message Design | v | | | | v | | | | |
| 9 | Foundation of Educational Technology | v | v | | | v | | | | |
| 10 | Curriculum Development | | | v | v | v | v | v | v | v |
| 11 | Performance Enhancement Technology | | v | v | | | | | | |
| 12 | Writing Scientific Papers | | | | | v | | | | |
| 13 | Learning Evaluation | v | | | | | v | v | | |
| 14 | Learning Technology Practices | v | | | v | | v | | | |
| 15 | Thesis Proposal | | | | | v | | | | |
| 16 | Management of Education and Training Programs | | | | | | | | v | |
| 17 | Digital Learning Resources | | v | | | | | | v | |
| 18 | Independent Learning | v | v | | v | | | v | | |
| 19 | Development of Printed Teaching Materials | | v | | | | | | | |
| 20 | Development of Audio Visual Teaching Materials | | v | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 21 | Evaluation of Learning Media | | V | | | | | | | |
| 22 | Master's Final Project | | | | | V | | | | V |

Each CPL item needs to be checked to see if it contains the appropriate skills and study materials, along with their context, for its level. Check to see if the study materials align with the disciplines developed in the study program and whether they align with students' learning needs according to their study program level. If the answers to both statements are positive, then the CPL items will then be used as the basis for developing the course.

## G. CURRICULUM STRUCTURE AND COURSE DISTRIBUTION

### 1. Curriculum Structure

The Master's in Instructional Technology curriculum consists of 7 credits of foundational courses, 43 credits of compulsory program expertise courses, and 4 credits of elective program expertise courses. The total is 54 credits. In addition, there are 4 credits of matriculation courses for students from non-Educational Technology undergraduate programs. Students may still take additional courses from other relevant study programs between 0-4 credits.

### 2. Distribution of Courses

To facilitate implementation, the curriculum structure needs to be presented in a semester-by-semester course distribution . The following is an example of a semesterby-semester course distribution.

Table 13. Distribution of Courses in the Master of Learning Technology Study Program

**SEMESTER I**

| No | Kode | Nama MK | SKS | | | Dosen yang biasanya Mengampu |
|---|---|---|---|---|---|---|
| | | | T | P | JML | |
| 1 | PAS8201 | Filsafat Ilmu | 2 | | 2 | Dr. Mulyo Prabowo, M.Pd. |
| 2 | PAS8202 | Metodologi Penelitian Pendidikan | 3 | | 3 | Dr. Haryanto, M.Pd.<br>Dr. Sugeng Bayu Wahyono |
| 3 | PAS8203 | Statistika | 2 | | 2 | Prof. Dr. Heri Retnawati, M.Pd. |
| 4 | TPB8201 | Teori Pembelajaran | 2 | | 2 | Prof. Dr. C. Asri Budiningsih, M.Pd. |
| 5 | TPB8202 | Teknologi Peningkatan Kinerja | 2 | | 2 | Dr. Christina Ismaniati, M.Pd. |
| 6 | TPB8303 | Multimedia Pembelajaran | 2 | 1 | 3 | Prof. Herman Dwi Surjono, Ph.D. |
| **Mata Kuliah Matrikulasi *) (wajib diambil oleh mahasiswa yang S1-nya berasal dari prodi NON-TP)** | | | | | | |
| 7 | TPB6201 | Desain Pesan Pembelajaran *) | 2 | | 2 | Dr. Ali Muhtadi, M.Pd. |
| 8 | TPB6202 | Dasar Teknologi Pembelajaran *) | 2 | | 2 | Dr. Christina Ismaniati, M.Pd. |

14

**SEMESTER II**

| No | Kode | Nama MK | SKS | | | Dosen yang biasanya Mengampu |
|---|---|---|---|---|---|---|
| | | | T | P | JML | |
| 1 | TPB8208 | Desain Pembelajaran | 2 | | 2 | Prof. Dr. C. Asri Budiningsih |
| 2 | TPB8204 | Evaluasi Pembelajaran | 2 | | 2 | Dr. Haryanto, M.Pd. |
| 3 | TPB8307 | Pengembangan E-Learning | 2 | 1 | 3 | Prof. Herman Dwi Surjono, Ph |
| 4 | TPB8205 | Pengembangan Kurikulum | 2 | | 2 | Dr. Ali Muhtadi, M.Pd. |
| 5 | TPB8210 | Penulisan Karya Ilmiah | 2 | | 2 | Ashadi, Ed. D. |
| 6 | TPB8206 | Praktik Teknologi Pembelajaran | | 2 | 2 | Dr. Christina Ismaniati |
| 7 | TPB8309 | Proposal Tesis | 2 | 1 | 3 | Dr. Sugeng Bayu Wahyono, M.Si.<br>Prof. Dr. Herminarto Sofyan |

**SEMESTER III (Mata Kuliah Pilihan) – Wajib memilih 2 MK**

| No | Kode | Nama MK | SKS | | | Dosen yang biasanya Mengampu |
|---|---|---|---|---|---|---|
| | | | T | P | JML | |
| 1 | TPB8215 | Pengelolaan Program Pendidikan dan Latihan | 2 | | 2 | Dr. Ali Muhtadi, M.Pd. |
| 2 | TPB8216 | Sumber Belajar Digital | 2 | | 2 | Dr. Puji Riyanto, M.Pd. |
| 3 | TPB8217 | Pembelajaran Mandiri | 2 | | 2 | Dr. Puji Riyanto, M.Pd |
| 4 | TPB8218 | Pengembangan Bahan Ajar Cetak | 2 | | 2 | Prof. Dr. Herminarto Sofyan, M.Pd. |
| 5 | TPB8219 | Pengembangan Bahan Ajar Audio Visual | 2 | | 2 | Dr. Sunaryo Soenarto, M.Pd. |
| 6 | TPB8220 | Evaluasi Media Pembelajaran | 2 | | 2 | Dr. Haryanto, M.Pd |

**SEMESTER IV**

| No | Kode | Nama MK | SKS | | | Dosen Pengampu |
|---|---|---|---|---|---|---|
| | | | T | P | JML | |
| 1 | TPB8611 | Tesis | | 6 | 6 | TIM TESIS |

## H. LEARNING PROCESS

The learning process in the Master of Instructional Technology (TP) Study Program is conducted in accordance with the National Standards for Higher Education (Permendikbudristek No. 53 of 2023), specifically the educational process standards, which include learning process standards, assessment process standards, and management standards. The learning process standards to achieve graduate

competencies include learning process planning, learning process implementation, and learning assessment.

The learning process is essentially an educational interaction between students and lecturers and other learning resources in a specific learning environment in an effort to achieve learning outcomes. As an educational interaction, the learning process needs to be planned and designed effectively. Effective learning process planning in the Master of Technology Program is carried out by lecturers and/or together with the Team of lecturers in coordination with the Master of Technology Program which includes formulating: a) learning outcomes that are the learning objectives, b) how to achieve learning objectives through learning strategies and methods, and c) how to assess the achievement of the formulated learning outcomes. The complete and thorough planning of the learning process for each course for one semester is outlined in the Semester Learning Plan (RPS) by lecturers independently or with the Team, and is always reviewed before the lectures are held in the upcoming semester or before the following semester.

After the course has been carefully designed in the form of a Lesson Plan (RPS), the learning process is implemented in accordance with the previously reviewed RPS. A pleasant, inclusive, collaborative, creative, and effective student-centered learning atmosphere is always created during the learning process. Furthermore, learning is facilitated by providing equal learning opportunities to all students regardless of educational background, social, economic, cultural, linguistic, student admission pathways, and special needs. In implementing the learning process, learning activities are carried out in a structured manner according to the direction of the lecturer and/or team of lecturers by implementing various learning strategies and methods, such as group discussions, simulations, case studies, collaborative learning, cooperative learning, project-based learning, problem-based learning, or other learning methods that can facilitate student learning as effectively as possible in an effort to achieve the specified graduate learning outcomes. The implementation of the learning process is also created by lecturers by ensuring the safety, comfort, and well-being of the academic community, as well as providing flexibility in the process of lifelong continuing education. This guarantee of safety and comfort can be achieved through efforts to prevent and handle acts of violence and discrimination in accordance with applicable laws and regulations. In addition, the implementation of the learning process is also carried out flexibly, namely the implementation of the learning process which: a) allows students to choose and follow the learning process in the form or method of face-to-face, distance learning including online, or a combination of face-to-face and distance learning, b) gives

students the flexibility to follow education/learning from various stages of the curriculum or study according to the study program, and c) allows students to complete their education through recognition of prior learning in accordance with the provisions of applicable laws and regulations.

The implementation of learning in the Master of Learning Technology Study Program is carried out with a semester credit system with a Curriculum Study Period of two (2) semesters for one (1) academic year, and if needed, the Study Program can hold 1 (one) intermediate semester. The implementation of the learning process in the intermediate semester is also carried out in accordance with and as with the learning process in the regular semester, referring to and fulfilling the applicable provisions, for example lectures are also held 16 times with a schedule of 2 meetings per week.

A student's study load during the learning process is expressed in semester credit units (SKs). A credit unit is the amount of study time assigned to students per week per semester during the learning process through various learning formats and represents a measure of recognition for the success of students' efforts in participating in curricular activities in their study program.

The study load of 1 (one) semester credit unit is equivalent to 45 (forty-five) hours per semester of lectures. This means that when a student takes a course with a weight of 1 credit unit, the study load is equivalent to 170 minutes of lectures (one hundred and seventy minutes, divided into 50 minutes for face-to-face lectures, plus 60 minutes for structured assignments, and 60 minutes for independent assignments). The credit weight of each course is at least 1 credit unit. To fulfill this study load, students participate in the learning process in the form of, among others: lectures, responses, tutorials, seminars, practicums, studio practice, research, design, development, final assignments, national defense training, student exchanges, internships, entrepreneurship, community service, and/or other forms of learning, namely through activities: a) guided learning, b) assignments, and c) independent.

Learning in the Master of Learning Technology program has utilized technological advances. Several courses have developed online lectures that can be used both fully and through blended learning, accessible through the Learning Management System (BeSmart UNY) at http://besmart.uny.ac.id/v2/. Students are also encouraged to utilize technology through various available applications.

The study load and curriculum duration for the Master of Learning Technology program range from 54 (fifty-four) semester credit units to 72 (seventy-two) semester credit units, designed with a curriculum duration of 3 (three) semesters to 4 (four)

semesters. Students in the Master of Learning Technology program are required to complete a final assignment in the form of a thesis, prototype, project, or other similar and equivalent form of final assignment.

Learning process assessments are always conducted in the Learning Technology Study Program, both at the beginning, middle, and end of the semester. These assessments are activities that assess the planning and implementation of the learning process, aimed at improving and enhancing the learning process. Learning process assessments are conducted by lecturers and/or a team of lecturers in coordination with the study program management unit and the internal quality assurance agency of PT (UNY).

Learning implementation essentially involves three stages: the introduction, core activities/presentations, and closing. Related to the principle of complete learning, learning activities are a process of facilitating students to gain learning experiences and completeness in accordance with the achievement of predetermined competencies. Therefore, a contextual approach with activities that encourage students to be active, innovative, creative, inspiring, and create a pleasant atmosphere, is a learning process that is continuously developed. The perspective of character, national values, and entrepreneurial spirit are inseparable parts in building the meaning of learning. Through the developed learning process, student success is determined not only by hard skills, intellectual abilities (achievement index), but also soft skills by looking at cognitive abilities, character, personality, and morality.

## I. EVALUATION

The learning assessment component, an essential part of the curriculum, aims to measure students' success in completing the specified learning outcomes. The learning assessment process in the Master of Learning Technology Study Program adheres to the assessment standards contained in Minister of Education and Culture Regulation No. 53 of 2023 concerning the Higher Education Quality Assurance System.

**educational, authentic, objective, accountable and transparent** principles .

1. The educational principle is implemented not only to measure the completion of CPL but also to encourage learning through providing constructive feedback, encouraging students to reflect on their learning process, improve weaknesses, and develop potential optimally.
2. The authentic principle is implemented using an approach relevant to the real world and professional context. In this context, students are assessed based on

assignments that reflect the situations and challenges they will face in the workplace, including projects, case studies, portfolios, or simulations.

3. Objective principle. Based on clear, measurable performance, which has been previously agreed upon through the course contract. The use of standardized rubrics or assessment guidelines minimizes subjectivity and ensures that each student is assessed fairly and equally.
4. The principle of accountability is reflected in the assessment process and results, which are academically and administratively accountable. Every decision made in the assessment is based on valid and well-documented evidence in accordance with academic standards and regulations at Yogyakarta State University.
5. The principle of transparency is implemented by providing clear information regarding the assessment objectives, success criteria, and assessment methods. Assessment results are presented openly, accompanied by informative feedback so students understand their strengths and areas for improvement.

The learning assessment carried out in the Master of Learning Technology Study Program, FIP UNY includes two main aspects, namely **process assessment** and learning **outcome assessment** .

1. Process assessment

   The aim is to gain an understanding of how students engage in the lecture process, including aspects of personality and character. The aspects of the process assessment include: A). *Soft skills aspects* in terms of participation in lecture activities include discipline, the ability to articulate ideas, responsibility, independence, professionalism, solidarity, and collaboration skills. B). Class participation aspects include attendance, initiative, and active participation in learning. Process assessment is carried out using observation methods, peer assessment, and portfolios. This assessment is carried out during the lecture process as one of the components that determine the final grade.
2. Assessment of results

   Aims to obtain an overview of competency achievement (CPL completion) after participating in the learning process. CPL measurement is carried out using an *Outcome-Based Assessment* (OBA) approach to ensure that each student has achieved the specified competencies. CPL is not measured directly but through more specific CPMK (Course Learning Outcomes), so that each course must have CPMK that contributes to a specific CPL. Each CPMK developed in a course must have a measurable assessment and is relevant to the CPL. Assessment of

outcomes is carried out through competency tests for each sub-competency or subCPMK taught, mid-semester exams, practical exams, and final semester exams. The method of assessing outcomes is carried out through written exams, essay/paper writing, oral exams, practical exams, and portfolios.

Various assessment techniques can be used in the learning assessment component, including observation, participation, performance, written tests, oral tests, and questionnaires. Assessment instruments for the learning process can include rubrics and/or portfolio assessments. The final assessment result is an integration of the various assessment techniques and instruments used.

Learning assessment should target as many domains of competence as possible, including attitudes, knowledge, and skills, developed in each course. The assessment methods used vary depending on the competency level (attitude, knowledge, general skills, and specific skills). Assessments are conducted through various methods, both tests and non-tests, to ensure authentic results and appropriateness to the type of competence or learning outcomes of the course. This includes the possibility of conducting non-test assessments that encompass the 4Ps (Performance, Product, Project, and Portfolio). In accordance with SN-Dikti, measurement/assessment at all levels of higher education must consider aspects of validity, reliability, comprehensiveness, character, and sustainability.

Examples of components and assessment weights for courses held in the Masters Program in Learning Technology, FIP UNY are presented in the following table:

Table 14. Assessment Components and Weights

| No | Assessment Techniques | Percentage of Assessment Weight | Information |
|---|---|---|---|
| 1 | Cognitive | 50 | Maximum accumulated assessment weight is 50% |
| | a. Presence | 5 | |
| | b. Quiz | 5 | |
| | c. Tasks | 5 | |
| | d. Mid-term exam | 10 | |
| | e. Final Exam | 25 | |
| 2 | Participatory | 50 | Accumulated assessment weighting of at least 50% |
| | a. Case study | 20 | |
| | b. *Team Based* Project | 30 | |
| Total | | 100 | |

Assessment reporting in the form of student success qualifications in completing a course stated in a range of numbers and letters in accordance with applicable academic regulations is as follows:

Table 15. Assessment Reporting

| **Final score** | **Conversion** | |
|---|---|---|
| **Scale 100** | **Letter** | **Weight** |
| 86 – 100 | A | 4.00 |
| 81 – 85 | A- | 3.67 |
| 76 – 80 | B+ | 3.33 |
| 71 – 75 | B | 3.00 |
| 66 – 70 | B- | 2.67 |
| 61 – 65 | C+ | 2.33 |
| 56 – 60 | C | 2.00 |
| 41 – 55 | D | 1.00 |
| 0 – 40 | E | 0.00 |

Students with high academic achievement are students who have a semester achievement index (IPS) greater than 3.50 (three point five zero) and meet academic ethics. Students of the Master of Learning Technology FIP UNY are declared to have graduated if they have completed all the study loads that have been set and have the targeted CPL with a GPA greater than or equal to 3.00 (three point zero). Students who are declared to have graduated are entitled to receive a diploma, title or designation and a certificate accompanying the diploma in accordance with statutory regulations. The predicate for student graduation has been regulated in SN-Dikti as in the following table:

Table 16. Graduation Predicate

| **No** | **Predicate** | **Cumulative GPA (IPK)** | **Maximum Study Period** |
|---|---|---|---|
| 1 | With Highest Praise ( *Summa Cum Laude* ) | 4.00 | 2.0 years |
| 2 | With Praise ( *Cum Laude* ) | 3.76 – 4.00 | 2.5 years |
| 3 | Very Satisfying ( *Very Satisfactory* ) | 3.51 – 3.75 | - |
| 4 | Satisfactory | 3.00 – 3.50 | - |

## J. CURRICULUM QUALITY ASSURANCE

The quality assurance system implemented is an *outcome-based quality assurance system* , a monitoring and evaluation system to ensure continuous quality improvement and ensure the achievement of learning standards and outcomes set by the educational program. The outcome-based quality assurance system is a system that ensures the establishment of learning standards/outcomes at the beginning and ends by ensuring the achievement and improvement of these standards/learning outcomes systematically and continuously.

In line with the implementation of the Internal Quality Assurance System of Higher Education, curriculum quality assurance in the Master of Learning Technology Study Program is carried out in line with the implementation of the Quality Assurance system at the Faculty of Education and Psychology Level by implementing a quality assurance cycle in the form of determination, implementation, evaluation, control and improvement (PPEPP). The following are the steps for curriculum quality assurance in line with the quality assurance system of higher education:

### 1. Curriculum Determination

The curriculum for the Master of Learning Technology study program begins with **a needs analysis** as the basis for developing a curriculum that is relevant to current demands and the needs of graduate users. This process involves studying the needs of the workforce through *tracer studies* , consultations with stakeholders, and benchmarking with similar study programs at home and abroad. Next, **a vision, mission, and graduate profile are formulated** , aligned with the strategic direction of the university, faculty, and study program. The formulated graduate profile must reflect the characteristics of educational technology science and readiness to face global challenges.

Once the graduate profile is established, the next step is **to develop graduate learning outcomes (CPL)** based on the Indonesian National Qualifications Framework (KKNI) level 8 and the National Higher Education Standards (SN-DIKTI). The CPL must include elements of attitudes, knowledge, general skills, and specific skills that align with the competencies of master's graduates. Based on the CPL, a **curriculum structure is developed** consisting of compulsory courses, elective courses, and a thesis or research activity, with a total study load of at least 36 credits in accordance with national regulations.

The next step is **mapping the relationship between CPL and courses** (curriculum mapping), which is arranged in a matrix to ensure that all CPL is accommodated in the courses offered. After that, each course is compiled into **a Semester Learning Plan (RPS)** , which includes objectives, teaching materials, learning methods, evaluation systems, and references used. This document serves as the primary reference for implementing classroom learning.

The next stage is **internal validation of the curriculum** , which is carried out through discussions within the curriculum team, reviews by internal quality assurance units (such as GKM or LPM), and discussion forums or Focus Group Discussions (FGDs) with experts and graduate users. After receiving input and improvements, the curriculum is submitted for **approval by the Faculty and University Senates** , which will assess its compliance with academic policies and institutional quality standards. Once approved, the curriculum **is officially ratified and ratified** by the university leadership, and is ready for implementation.

The final step is **the dissemination of the curriculum to faculty, students, and other stakeholders** to ensure a comprehensive understanding of the new curriculum's structure and objectives. The curriculum is then implemented in stages, typically starting with the new student intake in the following academic year, with ongoing mentoring and monitoring as part of the quality assurance cycle. The following is a flowchart of *the* curriculum development process for the Educational Technology master's program.

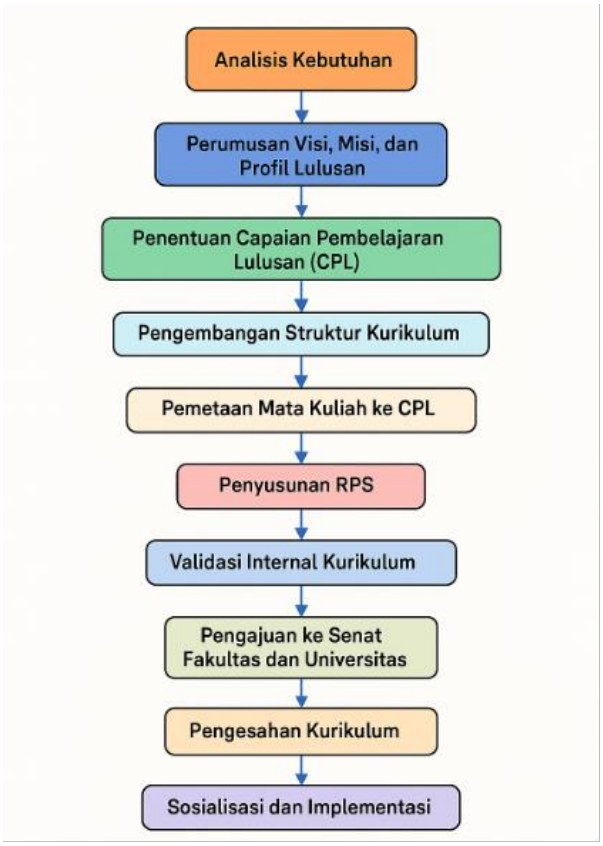



Figure 2 steps for determining the curriculum

**2. Curriculum Implementation**

After the curriculum is officially established, the next stage is its implementation within the UNY Master of Learning Technology Study Program. This curriculum implementation aims to ensure that graduate learning outcomes (CPL) are achieved through an effective, structured, and measurable learning process.

Implementation begins with the preparation of a lecture schedule by the study program manager, based on the approved curriculum structure. This schedule includes the distribution of compulsory and elective courses each semester, as well as the assignment of lecturers with competencies appropriate to the course content. Lecturers are required to prepare and submit a Semester Learning Plan (RPS) to students at the beginning of the semester. The RPS serves as a guide for lecturers and students in conducting lectures based on learning outcomes.

*student-centered* approach that prioritizes interactivity, the use of educational technology, and the application of active learning methods such as discussions, case studies, and projects. Learning can be conducted face-to-face, online, or hybrid, depending on academic policies and learning needs. Students are encouraged to

actively participate in scientific discussions, research, and publications from the beginning of the semester.

To ensure quality implementation, regular lecture monitoring is conducted by study programs and the internal quality assurance unit (GKM). Monitoring includes lecturer and student attendance, adherence to the lesson plan (RPS), and learning outcomes. Learning evaluation is conducted through formative and summative assessments, including individual assignments, presentations, midterm and final exams, and final projects. Assessments are conducted transparently and based on an agreed-upon rubric.

In the final semester, students are required to write a thesis as a culmination of their learning and proof of mastery of research competencies. The thesis writing process is conducted under the guidance of a supervisor appointed by the study program and includes a proposal seminar, a thesis examination, and dissemination of research results in scientific forums or publications.

The entire curriculum implementation process is documented and evaluated at the end of each semester in the study program's academic evaluation meeting.
These evaluation results serve as the basis for curriculum improvements during the control and improvement phase of the academic quality assurance cycle. With a systematic and quality-assured implementation process, the UNY Master of Instructional Technology Study Program is committed to producing superior graduates who are adaptable to technology and able to contribute to the development of national and global education.

**3. Curriculum Evaluation**

Curriculum evaluation in the UNY Master of Learning Technology Study Program is an integral part of the academic quality assurance cycle which aims to ensure that the implemented curriculum remains relevant, responsive to developments in science and technology, and is able to produce graduates in accordance with the established learning profiles and outcomes.

The evaluation process is conducted periodically **and systematically** , both at the course level and at the overall study program level. Course-level evaluations cover the effectiveness of material delivery, the achievement of the Semester Learning Plan (RPS), the learning methods used, and the assessment system and results. This evaluation is obtained from student feedback through a survey

instrument that assesses student satisfaction with the learning process and the lecturers.

At the study program level, **curriculum evaluations are conducted at least every four years** , or sooner if there are changes in national regulations, changes in graduate user needs, or findings from tracer studies and internal quality audits. These evaluations cover the relevance of CPL to workplace needs, the currency of learning materials, the suitability of learning methods to technological developments, and the efficiency and effectiveness of student study load planning.

The evaluation instruments used include: (1) Student and alumni satisfaction surveys; (2) Tracer study results (graduate tracking); (3) Stakeholder or graduate user satisfaction surveys; (4) Evaluation of lecturer and course performance; (5) Results of internal and external quality audits; and (6) Review of student thesis and publication results.

This evaluation process is coordinated by the Study **Program's Quality Control Group (GKM) in** collaboration with the University's Quality Assurance Institute (LPM). The evaluation results are discussed in a **study program academic** evaluation **meeting** , attended by permanent lecturers, study program managers, and stakeholder representatives. This meeting produces recommendations for curriculum improvement and refinement.

By conducting a comprehensive and participatory evaluation, the UNY Master of Instructional Technology Study Program can identify strengths, weaknesses, and opportunities for curriculum development. The results of this evaluation will form the basis for curriculum control and improvement processes to ensure it remains adaptive and high-quality.

**4. Curriculum Control**

Curriculum control in the UNY Master of Learning Technology Study Program is a systematic effort to ensure that curriculum implementation aligns with established academic quality standards, Semester Learning Plans (RPS), and Graduate Learning Outcomes (CPL). This stage is crucial to ensuring consistency, appropriateness, and the ongoing achievement of educational goals.

Control is carried out through **monitoring and supervision mechanisms** implemented by the Study Program Quality Control Group (GKM) in collaboration with study program leaders and course lecturers. Monitoring covers administrative and substantive aspects of learning, such as the alignment of lecture implementation

with the RPS, the implementation of designed learning methods, and the alignment of the workload and evaluation system with the targeted CPL.

The control instruments used include: (1) Checklist for monitoring lectures per semester; (2) Lecturer performance reports (including implementation of RPS and use of learning technology); (3) Student study progress reports, especially at the thesis research stage; and (4) Internal quality audits (AMI) conducted periodically by LPM UNY.

In addition, **periodic reviews of the RPS are conducted** to ensure that teaching materials, references, and learning approaches remain up-to-date with developments in science, technology, and community needs. If any discrepancies or obstacles are identified in implementation, the study program immediately provides follow-up in the form of guidance, document revisions, or training for the lecturers.

In the context of a master's degree, supervision also includes **oversight of thesis quality** , including the guidance process, originality of the scientific work, and the topic's suitability to the graduate's competencies. Each thesis must go through a proposal seminar, intensive guidance, a thesis examination, and validation of its suitability to the curriculum by the supervisor and examiners.

All control data is compiled and reported in internal program evaluation meetings as a basis for academic decision-making. With rigorous and measurable control mechanisms, the UNY Master of Instructional Technology Program is able to maintain the quality of curriculum implementation and ensure that all learning activities align with the institution's mission and national and international quality standards.

**5. Curriculum Improvement**

Curriculum enhancement in the UNY Master of Learning Technology Study Program is a strategic step in the academic quality assurance cycle, aiming to continuously improve the curriculum. This process is based on the results of curriculum evaluation and control, and takes into account developments in science, technology, community needs, national regulations, and global dynamics in the field of educational technology.

Curriculum improvement is carried out through various means, such as **refining graduate learning outcomes (CPL)** , adjusting course structures, developing learning content, and innovating learning methods and strategies. Study programs actively review **tracer study results** , feedback from graduate users, alumni career

development tracking studies, and benchmarking with similar study programs at home and abroad. This data serves as a critical basis for curriculum improvement decisions.

Improvement efforts also include **adjustments to national policies** , such as the SN-DIKTI (National Higher Education Standards), the latest Permendikbudristek (Minister of Education, Culture, Research, and Technology), and the direction of higher education development. If there are changes to the regulatory framework or global competency requirements (for example, mastery of digital learning environments, AI proficiency in education, and interactive media development capabilities), study programs immediately make adjustments by involving the curriculum development team, external experts, and relevant stakeholders.

Curriculum improvements focus not only on content but also on **learning and assessment approaches** . Strengthening *project-based* learning, *research-based learning* , and technology-based learning models is a key focus to produce adaptive and innovative graduates. Furthermore, the assessment system has been updated to be more authentic, performance-based, and reflect real-world competencies needed in the field.

Formally , the results of the curriculum improvements are discussed in curriculum team meetings and validated through academic processes at the faculty and university levels. After approval, **socialization is carried out to lecturers, students, and stakeholders , and** *curriculum* documents such as the RPS, curriculum books, and academic guides are updated.

*of Learning* Technology Study Program ensures that the curriculum implemented is always relevant to the demands of the times and is able to produce graduates who excel in the theory and practice of educational technology at the national and international levels.

## K. COURSE DESCRIPTION

### I. SCIENTIFIC FOUNDATION COURSES

| PPS80201 PHILOSOPHY OF SCIENCE |
|---|

This course examines the nature, position, and scope of the philosophy of science, the foundations of knowledge and science, the three dimensions of philosophy including ontology, epistemology, and axiology. The foundations of knowledge and science include: the nature of knowledge and truth. Ontology includes: metaphysics, assumptions, opportunities, several assumptions in science and the limits of scientific exploration. Epistemology includes: the needle of the history of knowledge, sources and ways of acquiring knowledge, scientific methods, building rational-logical-scientific thinking, and the structure of scientific knowledge. Axiology covers science and morals, the social responsibility of scientists, and moral choices.

**PPS80302 EDUCATIONAL RESEARCH METHODOLOGY**

This course examines; 1) the meaning and scope of educational research, particularly in the field of learning technology, 2) ethics in research in the field of learning technology, 3) research problems in the field of learning technology, 4) research variables, 5) theoretical studies and hypotheses in research, 6) relevant research models in the field of learning technology, 7) population and samples, 8) research techniques and instruments, 9) validity and reliability of instruments, 10) data analysis techniques, 11) preparation of research proposals, and 12) reporting of research results.

**PPS80303 STATISTICS**

This course discusses: Basic concepts of statistics; Frequency distribution; Central tendency; Measuring variability; Probability theory; Sampling theory; Hypothesis testing; Large sample data analysis; Small sample data analysis; Correlation; Regression; Factor analysis; and Path analysis.

## II. STUDY PROGRAM EXPERTISE COURSES

**TPM80201 LEARNING THEORY**

This course aims to equip students with positive attitudes and perceptions towards the field of study of learning and instructional theory, starting from descriptive and prescriptive theories as well as various learning theories and their application in learning programs. The theories in question include; behaviorist theory, cognitive theory, constructivist theory, socio-cultural learning theory (coconstructivist), humanistic theory, information processing theory (cybernetics), multiple intelligences theory and neuroscience. Students are able to apply these theories to learning models/sources/media, as well as develop learning components in accordance with the learning theory that serves as the basis/foundation. The lecture approach combines synchronous and asynchronous methods through expository by the lecturer and structured assignments by students in the form of presentation papers (in pairs) and applied assignments (independently). Grading focuses on student engagement in general classroom interactions, the quality of presentations and feedback given to fellow students regarding their written ideas, the quality of the submitted written work, both in terms of substance/content and its presentation in formal written form, and the quality of exam answers. Such learning activities begin with *acquiring knowledge, refining knowledge, and applying knowledge contextually.*

**TPM80202 PERFORMANCE ENHANCEMENT TECHNOLOGY**

This Performance Improvement Technology course, apart from aiming to develop students' attitudes and character (religious, cooperative, caring and respecting others), also provides students with learning experiences so that they are able to: 1) understand the basic concepts of performance technology and performance improvement technology referring to the definition of TP (2004) and performance improvement interventions,
2) conducting performance improvement needs analysis in various institutions as well as individuals and groups, and classical performance improvement interventions, and 3) conducting performance improvement needs analysis for individuals, groups, and institutions and performance improvement interventions through organizational interventions both through improving learning organizations and CURRENT interventions. Therefore, the material discussed broadly includes 3 general parts, namely the Concept and Basic Principles of Performance Improvement Technology (Tepekin), Forms of Performance Improvement Technology, Performance Analysis and Performance Improvement Needs, Learning Interventions (Classic/Training), and Organizational Interventions and Current Interventions. Lectures are conducted with a cooperative/collaborative learning model and Project Based Learning virtually and/or blended learning (flexible learning), namely online or offline with an SCL approach and oriented towards theory and practice. Assessment is carried out on both activities during lectures and products resulting from practical analysis and development of learning intervention models, both in the form of training (Classic) and contemporary ones to facilitate learning and improve performance in an institution, whether an educational institution, an institution/DUDI, or other institutions (non-educational).

**TPM80203 MULTIMEDIA LEARNING**

This 3-credit course is delivered in theory and practice using the following strategies: assignments, studies, discussions, independent practice, and project work. The course begins with a discussion of the concepts, functions, utilization, and development of learning media. Next, it discusses the principles, design, development, and evaluation of multimedia learning. It also discusses the characteristics and methodology of multimedia learning software, the concept of interactive multimedia learning, and the process of digitizing multimedia components. Students will explore and use authoring software to edit and produce interactive learning multimedia applications as their final project.

**TPM80204 LEARNING EVALUATION**

Students have broad insight into learning evaluation and its follow-up, and are able to apply it in their learning. Therefore, they need to be facilitated and encouraged to master the concepts of: tests, measurement, assessment, evaluation, the relationship between assessment and learning, types of assessment, authentic assessment, including portfolio assessment, the requirements for good instruments, and the skills to develop one type of learning assessment, including the skills to analyze items. Learning in this course consists of lectures, Q&A, discussions, assignments, presentations, and practice.

**TPM80205 CURRICULUM DEVELOPMENT**

This course aims to provide students with the ability to understand and analyze the concept of curriculum and learning, curriculum development in Indonesia, dimensions of curriculum development, curriculum concept models, learning model clusters, foundations for curriculum development, principles of curriculum development, components and design of curriculum organization, curriculum development models, curriculum evaluation models, concepts and procedures for developing KTSP, concepts and procedures for developing K13, concepts and procedures for compiling thematic learning in schools, concepts for developing KKNI curriculum in universities, as well as student creativity in developing curriculum designs for superior school models.

**TPM80206 LEARNING TECHNOLOGY PRACTICES**

The PTP course aims to facilitate student learning by providing opportunities to analyze learning needs and improve student performance and apply them. To achieve this goal, the lecture material studied consists of theory and application of designing learning resources in various technological packages followed by production practices, designs and practices both in efforts to improve learning outcomes and performance as well as conducting practice in organizing learning processes in several classes. The methods used are discussion, demonstration, training, practice, and

experiments and simulations accompanied by feedback. Assessments are carried out on both the resulting product and activities in facilitating learning and improving performance as well as assessments of affective aspects and performance assessments.

**TPM80307 DEVELOPMENT OF PJJ AND E-LEARNING**

This course discusses the concepts, utilization, design, development, and evaluation of e-learning. Students also examine the development of e-learning technologies and systems. Students are also expected to master e-learning development tools and the LMS Moodle and apply them to the development and management of e-learning portals on the internet. Students create two projects: a learning website and an e-learning portal.

**TPM80208 LEARNING DESIGN**

This course aims to enable students to design learning systems coherently and contextually. The material studied includes learning as a system, learning system design assumptions, underlying theories, and components of learning system design. Various learning system design models and their implementation in various contexts. Students review research results and practices of learning system design models from various journals and other sources. The lecture approach combines expository methods by lecturers with structured assignments by students in the form of group material studies and independent applied assignments. Grading is centered on active student involvement in class interactions, the quality of written ideas submitted both in terms of substance and in the form of written work, and the quality of exam answers.

**TPM80309 THESIS PROPOSAL**

Course Description: This course provides an opportunity for each student to present a thesis proposal consisting of Chapter I (Introduction), Chapter II (Theoretical Review), Chapter III (Research Method), and thesis research instruments in accordance with the data collection methods used in their research design. During the seminar, students receive input from seminar participants, supervisors, and lecturers in charge of the course to improve the proposal and instruments they have prepared. In addition, this course also equips students with good and effective presentation methods, as well as a scientific attitude to receive constructive input.

**TPM80210 WRITING OF SCIENTIFIC WORKS**

Writing for dissemination of scientific papers is a must for all academics. This course presents the basic concepts, tips, and tricks of writing scientific papers and writing styles, practicing writing the important parts of a scientific paper, both sourced from research results and non-research (theoretical studies or opinions). The final result of this course is a scientific article written specifically for conferences (proceedings) or journals that are appropriate to the scope of each study targeted by the student. After taking this course, students are expected to gain guidance in selecting publication targets, strengthening the content of the article, composing it according to the publication target format, and having a positive attitude towards writing and publication ethics.

**TPM81011 MASTER'S FINAL PROJECT**

This course is a final course that is required for students of the Master of Learning Technology Program as a form of the culmination of learning achievements of the study program. Students conduct independent research in the field of learning technology by integrating theory, methodology, and practice that has been learned during the study. Through this final assignment, students are expected to be able to design, implement, and evaluate an innovative technology-based solution to solve learning problems in formal, non-formal, or corporate educational environments. Research can take the form of learning media development, digital learning system design, program evaluation, implementation studies of educational technology policies, and other topics relevant to the scientific competencies of the study program. The results of the final assignment are compiled in the form of a scientific report (thesis) and defended in an academic examination before a board of examiners.

**TPM81012 MANAGEMENT OF EDUCATION AND TRAINING PROGRAMS**

This course aims to develop students' analytical and synthesis skills in designing and managing training, starting from identifying needs, developing curriculum, selecting learning strategies, developing learning resources, managing training implementation, and conducting training evaluations. In addition to solving general training problems.

**TPM81013 DIGITAL LEARNING RESOURCES**

This course examines the basic concepts and types of learning resources in schools and in the community, the scope of learning resource management, analysis of learning resource needs for schools and the community, planning, organizing, procuring, utilizing, and evaluating MSB in schools and the community, as well as the practice of creating online learning resource service programs.

**TPM81014 INDEPENDENT LEARNING**

This course equips students with the development of basic human abilities in independent learning according to system trends, technological support, and future learning styles. The course equips students with the concept of independent learning and related terms ( *self-regulated learning, selfdetermined learning, and self-motivated learning* ), the anatomy of the concept of independent learning, and the basic paradigms that underlie independent learning and the development of learning motivation through online. Efforts to apply the concept of heutagogy through a web-based distance learning model, its challenges and evolution, techniques for fostering learning motivation and strategies for developing independent learning motivation through distance learning, principles of future independent learning and its supporting technology, learning techniques to foster learning motivation, progressive learning models and the concept of learning in work.

**TPM81015 PRINTED TEACHING MATERIALS DEVELOPMENT**

This course will discuss the concept of printed teaching materials, their development, and the stages of development. The course material will be delivered online, supported by video conferences available on Besmart. Evaluation will be conducted through independent assignments and a final exam.

**TPM81016 DEVELOPMENT OF AUDIO VISUAL TEACHING MATERIALS**

The audiovisual learning materials development course aims to develop students' thinking about the concepts, principles, and procedures for developing audiovisual learning media (especially learning video programs) as teaching materials. Learning video programs are highly relevant to be developed and implemented by teachers/educators/lecturers in primary, secondary, higher education, and training. The main studies include: the concept of technology in education and learning media, the concept of learning media taxonomy, development models, production procedures for learning video programs, and validating learning video programs. This course also examines various research on the development of teaching materials as learning media. At the end of the course, students develop and validate instruments for the feasibility of learning video media. The course is conducted using a student-centered learning approach. Competency-based assessments include: active participation, portfolios of assignments, and mid-term and final exams.

**TPM81017 LEARNING MEDIA EVALUATION**

This course examines the concept of learning media evaluation, the purpose, benefits, and importance of learning media evaluation; how to plan and implement learning media evaluation; procedures and techniques for collecting data in media evaluation; procedures for developing media assessment scale instruments and rubrics; concepts, characteristics (important components) of various learning media and determining the criteria for good learning media; validity and reliability of instruments; data analysis techniques, and development practices. learning media assessment instruments.

## III. MATRICULATION COURSES (NON-TP Students)

| TPM81018 LEARNING MESSAGE DESIGN |
|---|
| Message design involves “planning to engineer the physical form of a message.” This course examines the theories underlying message design, such as cognitive structure theory, information processing theory, and communication theory, encompassing the principles of attention, perception, and absorption, to organize the physical form of a message for effective communication. Message design deals with the most micro level through small units such as visual materials, sequences, pages, and screens separately, specific to both the media and the learning task. Therefore, it is necessary to also examine the principles of message design and the characteristics of the media containing the message. |

| TPM81019 FOUNDATIONS OF EDUCATIONAL TECHNOLOGY |
|---|
| This Educational Technology Foundation course is a matriculation course, aimed at facilitating learning so that S2TP students understand in depth the philosophical foundations and theories, as well as the practical foundations of TP, the development of TP concepts and their application in efforts to facilitate learning and improve the performance of students or human resources as lifelong learners (anywhere and anytime) with various technologies (processes and sources) that are appropriate, effective, innovative, scientific, and ethical. To achieve these goals, the materials/study materials discussed in this course include: Philosophical Foundations, TP Theory and Practice, Technology Concepts and Development of TP Concepts, TP Definition Components (AECT, 2004), TP Areas, Expertise and Devotion in supporting the learning process, teaching, and performance improvement; and TP Applications and Roles in Learning Organizations. Discussions on Innovation, Trends & Problem Issues, and Research in the field of TP will be interesting topics discussed in this lecture. All of these materials are discussed both theoretically and practically, particularly related to solving learning and teaching/education problems in Indonesia. Lectures are conducted using a blended learning approach and method (Blended Learning type Flipped-Learning) and emphasize active learning in students to discuss and present in their discussions with lecturers as facilitators and learning resources. Assessments are carried out on student learning processes and outcomes that include activeness, task fulfillment, presentations, academic attitudes and ethics, and tests (midterm and final exams). Students present group papers in lectures and compile individual papers as individual final assignments. |

Semester Learning Plan (RPS)

**SEMESTER LEARNING PLAN (RPS)**

Study Program : All Masters Programs at UNY Postgraduate Program
Course Name : Philosophy of Science Code: PAS-8201 Number of Credits: 2 Credits
Semester : Odd Semester
Prerequisite Courses : -
Instructing Lecturer : Prof. Dr. Sugeng Bayu Wahyono, M.Sc.
Course Description : This course examines the nature, position and scope of the philosophy of science, the foundations of knowledge and science. Knowledge, three dimensions of philosophy include ontology, epistemology, and axiology. The basics of knowledge and science include: the nature of knowledge and truth. Ontology includes: metaphysics, assumptions, opportunities, some assumptions in science and the limits of scientific exploration. Epistemology includes: the needle of the history of knowledge, sources and ways of acquiring knowledge, scientific methods, building rational-logical-scientific thinking, and the structure of scientific knowledge. Meanwhile, axiology covers science and morals, the social responsibility of scientists, and moral choices.

Learning Outcomes : Students have a complete understanding of the basis, theory, schools of thought, and implications of implementing the Philosophy of Science. as a foundation for the development of various fields of science, both in the ontological, epistemological and axiological dimensions.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|
| **Meeting To-** | **Learning Outcomes** | **Study Material/Topics** | **Learning Forms/Models** | **Learning Experience** | **Assessment Indicator** | **Assessment Techniques** | **Assessment Weight (%)** | **Time (Minute)** | **Reference** |
| 1 | Understand the design, description, and ins and outs of lectures. | Overview of the lecture, scope, targets, methods and evaluation. | *Transactional learning* | Students listen and provide suggestions. | _ | _ | _ | 100 | Beerling et al. 1998. *Introduction to the Philosophy of Science.* Yogyakarta: Tiara Wacana . |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 2.3 | Understanding the relationship between philosophy, science, and knowledge. | • Introduction to philosophy, science, and knowledge.<br>• The relationship between philosophy and knowledge and science | *Discovery learning* | Reading, listening, and discussing | cognitive | Oral test | 15 | 200 | The Liang Gie. 1997. *Introduction to the Philosophy of Science* . Yogyakarta: Liberty. |
| 4 | Understanding the basics of knowledge: the nature of knowledge and truth. | The foundations of knowledge: the nature of knowledge and truth. | *Small group discussion* | Reading, listening, and discussing. | Cognitive and affective | Written test | 10 | 100 | The Liang Gie. 1997. *Introduction to the Philosophy of Science* . Yogyakarta: Liberty. |
| 5 | Understanding the basic concepts of science | Basic concepts of science | *Collaborative learning* | Reading, listening, and discussing | Cognitive and affective | Written test | 10 | 100 | Noeng Muhadjir. 1998. *Philosophy of Science.* Yogyakarta: Rake Sarasin. |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 6.7 | Understanding the basic ontological dimensions of science . | • Reality, objects of science, and the structure of science.<br>• Metaphysics, assumptions, and opportunities. | *Discovery learning* | Reading, listening, and discussing | Cognitive and psychomotor. | Written test | 20 | 200 | Jujun S. Suriasumantri. 2004. *Science in Perspective.* Gramedia, Jakarta. Ketut Rinjin. 1997. *Introduction to the* |

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|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | *Philosophy of Science and Basic Social Sciences.* Bandung: Kayumas. |
| 8.9 | Knowing the ontology of scientific development | Various assumptions in science, and the limits of scientific exploration. | *Small group discussion & presentation* | Presentation and discussion | Cognitive and affective | Written test | 15 | 200 | Conny Semiawan et al. 2007. *Panorama of the Philosophy of Science* , Jakarta: Teraju. Ahmad Tafsir. 1998. *Philosophy of Science* , Rosdakarya Youth, Bandung. |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 10.11 | Understanding the epistemological dimensions of science | • The needle of the history of knowledge, sources and ways of obtaining knowledge.<br>• Scientific method, and building rational-logicalscientific thinking,<br>• The structure of scientific knowledge. | *Contextual learning* | Reading, listening, and discussing | Cognitive and affective | Oral test | 20 | 200 | Franz MagnisSuseno. 1995. *Philosophy as a Critical Science.* Yogyakarta: Kanisius.<br>Arif Rohman, Rukiyati, & Andriani. 2014. |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | *Epistemology & Logic: Philosophy for Educational Development*. Yogyakarta: UNY Press and Aswaja Pressindo. |

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|---|---|---|---|---|---|---|---|---|---|
| 12.13 | Analyzing the axiological dimensions of science. | • Axiology of science and morals.<br>• Social responsibility and moral choices in science. | *Contextual learning* | Reading, listening, and discussing | Cognitive, affective, psychomotor. | Written test | 20 | 200 | Louis O. Kattsoff. 1992. *Introduction to Philosophy* . Yogyakarta: Tiara Wacana. Pudjawijatna. 1989, *Tofu and knowledge.* Yogyakarta: Kanisius. |
| 14.15 | Applying thesis research methodology. | Application of research methodology development in thesis. | *Small group discussion* | Presentation and discussion | Cognitive | Written test | 15 | 200 | Lexy J. Moleong. 2005. *Qualitative Research Methodology* . Bandung: Rosdakarya Youth |

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|---|---|---|---|---|---|---|---|---|---|
| 16 | Final Exam | Test all materials/substances. | *Paper test* | | Conjective | Written Test | 100 | 100 | |

Evaluation :

| No. | Evaluation Components | Weight (%) |
|---|---|---|
| 1. | Tasks | 20% |
| 2. | Quizzes/Questions | 20% |

| | | |
|---|---|---|
| 3. | Class participation | 20% |
| 4. | Final exams | 30% |
| 5. | Attitude, behavior, presence | 10% |
| | Amount | 100% |

**Reference Book**

Ahmad Tafsir. 1998. *Philosophy of Science* , Rosdakarya Youth, Bandung.
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**Additional literature**

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Lexy J. Moleong. 2005. *Qualitative Research Methodology.* Bandung: Remaja Rosdakarya.
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Yogyakarta, December 10, 2024
Lecturer Philosophy of Science course

**Prof. Dr. Sugeng Bayu Wahyono**

| | | | | | |
|---|---|---|---|---|---|
| | **MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION POSTGRADUATE - STATE UNIVERSITY OF YOGYAKARTA** | | | | |
| | **SEMESTER LEARNING PLAN** | | | | |
| | **NO.:RPS / TPB8219** | SEM:3 | Credits: 2T | Revision: 02 | October 22, 2022 |

**STUDY PROGRAM : S2 Learning Technology**
**SUBJECT : Development of Audio Visual Teaching Materials SUPPORTING**
**LECTURER : Dr. Deni Hardianto, M.Pd.**

## I. COURSE DESCRIPTION

audiovisual learning materials development course aims to develop students' thinking about the concepts, principles, and procedures for developing audiovisual learning media (especially learning video programs) as teaching materials. Learning video programs are highly relevant to be developed and implemented by teachers/educators/lecturers in primary, secondary, higher education, and training. The main studies include: the concept of technology in education and learning media, the concept of learning media taxonomy, development models, production procedures for learning video programs, and validating learning video programs. This course also examines various research on the development of teaching materials as learning media . At the end of the course, students develop and validate instruments for the feasibility of learning video media . The course is conducted using a *student-centered learning* approach . Competency-based assessments include: active participation, portfolios of assignments, and mid-term and final exams.

## II. LEARNING OUTCOMES OF RELATED STUDY PROGRAM

a. **Attitude**

1. Have faith in God Almighty and be able to show a religious attitude (A1).
2. Respecting the diversity of cultures, views, religions and beliefs, as well as the original opinions or findings of others (A5). b. **Knowledge**

1. Mastering learning theories, development, utilization, management, and evaluation of appropriate technological processes and resources to facilitate learning and improve performance in an innovative manner (B1).
2. Applying learning theories, design, development, utilization, management, and evaluation of learning processes and resources to produce innovative learning technology works in the form of multimedia, e-learning, mobile learning, blended learning (B2). c. **General Skills**

1. Able to develop logical, critical, systematic, and creative thinking through scientific research, creation of designs or works of art in the field of science and technology that pay attention to and apply the values of the humanities in the field of learning technology, compile scientific concepts and study results based on scientific rules, procedures, and ethics in the form of a thesis, and publish writings in nationally accredited scientific journals and obtain international recognition in the form of scientific presentations or equivalent (C1). d. **Special Skills**

I. Able to develop designs or technological works including appropriate learning processes and resources in the form of printed technology, audio visual, multimedia, e-learning, mobile learning, and blended learning to facilitate learning through logical, critical, systematic, innovative and creative thinking (D2).

**III. LEARNING PLAN MATRIX**

| The th meetin g | CPMK | CPL charged | Study Material/ Subject | Learning Model/Method | Learning Experience | Assessment Indicators | Assessment Techniques | Bill Weight | Time | Refere nce |
|---|---|---|---|---|---|---|---|---|---|---|
| (1) | (2) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| **1-2** | 1. Understanding the taxonomy of learning media<br>2. Distinguishing the characteristics of various learning media<br>3. Analyzing the advantages and disadvantages of various learning media | A(1)<br>P(1) | • Taxonomy of Learning Media<br>• Characteristics of various learning media<br>• Advantages and disadvantages of learning media • Functions of learning media | Lecture<br>Brainstorming<br>Question and answer | Students study RPS, teaching materials and analyze the characteristics of various media. | Students are able to:<br>• understand RPS content<br>• Analyzing the characteristics of various media | Active participation | | 2x(2x50) | 5&6 |
| **3-4** | 4. Understanding the characteristics of audio visual (video) program media advantages and<br>5. disadvantages of audio visual media programs (video)<br>6. Reviewing the results of research on audiovisual (video) media programs | A(2)<br>P(2)<br>KU(1) | • Review of national and international journals on research results on the development of learning video program media | Lecture<br>Discussion<br>Assignment<br>Presentation | Students analyze the characteristics of various audiovisual media and review various published research studies. | Students are able to:<br>• analyzing the characteristics of various audiovisual media<br>• Presenting research studies | • Article Presentation<br>• Active participation | 15% | 2x(2x50) | 5&6 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **5-8** | 7. Analyzing various models of learning materials development<br>8. Distinguishing the advantages and disadvantages of learning media development models | A(2)<br>P(2) | • Learning Media Development Models Development models ADDIE, ASSURE, Hannafin and Peck, 4D and, Borg and Gall. | Brainstorming<br>PBL<br>Blended Learning | Students analyze the advantages of Audio Visual teaching material development models | Students are able to:<br>• Analyzing AV development models | | 10% | 2x(2x50) | 8 |
| **9** | **Mid-Semester Exam (UTS)** | | **Mid-Semester Exam (UTS)** | | | | | 20% | 2x50 | |
| **10-11** | 9. Developing learning video programs<br>10. Identifying video program production equipment | P(2)<br>KK(1) | • Development of Learning Video Programs<br>• Audio visual studio visit | PBL<br>Blended Learning | Students observe AV studios and develop AV program scripts. | Students are able to:<br>• identifying AV studio equipment<br>• describe the functions of AV equipment | Equipment function description task | 10% | 2x(2x50) | 4&7 |
| **12** | 11. Understanding the production procedures for learning video programs | KK(1) | Instructional video program production procedures | Discussion | Students understand the SOP for AV program production | Students are able describe the AV program production procedure | | | 2x50 | 8 |
| **13-14** | 12. Compiling a video learning program script | KK(1) | • Compiling a video learning program script<br>Learning video program script format | Simulation of writing a script<br>Discussion<br>Assignment | Skilled students compose AV program scripts | Students are able skilled at composing AV program scripts | AV program script quality | 35% | 2x(2x50) | 4&7 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **15-16** | 13. Developing a validation instrument for a learning video program<br>14. Implementing validation instruments for material and media aspects | KK(1) | • Developing a validation instrument grid for learning video programs • Trial of the validation instrument for the learning video program | PBL<br>Discussion<br>Simulation | Students develop an AV program validation instrument grid and validate the AV program validator instrument. | Students are able<br>• develop AV program validation instruments<br>• perform AV program validator | AV program validation instrument quality | 10% | 2x(2x50) | 1&2 |
| | | | | | | | | | | |

**IV. ASSESSMENT WEIGHT**

| NO | ASPECT | BILL TYPE | MAXIMUM VALUE | WEIGHT |
|---|---|---|---|---|
| 1 | Cognitive & Affective Abilities | Assignments and Presentations (including references to 5 international journals) | 0-100 | 45 % |
| | | Mid-term exam | 0-100 | 20% |
| | | U.S. | 0-100 | 3 5 % |
| | | Paper Presentation | 0-100 | 15 % |
| 2 | Presence | 100% attendance | 100 | 10 % |
| | | Absent once | 90 | |
| | | Absent twice | 80 | |
| | | Absent three times | 70 | |
| | | Absent four times | 60 | |

**V. LITERATURE SOURCES**

1. Arif Sardiman. (2001). Educational Media. Jakarta: Pustekkom Diknas.

2. Azhar Arsyad. (2003). Learning Media. Jakarta : PT. Raja Grafindo Persada.
3. Fischer, Walter. (2010). Digital Video and Audio Broadcasting Technology (Fourth Edition). Switzerland : Springer 4. Murator, Stephen. (2004). *Digital Videomarker: Guide to Digital Video and DVD Production* . Burlington: Jordan Hill.
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Yogyakarta, August 2024
Lecturer,

Dr. Deni Hardianto, M.Pd.

## CLOSING

This curriculum document for the Master of Learning Technology Study Program is designed as the primary guideline for the implementation of the educational process at the master's level, aiming to produce graduates who are professional, innovative, and able to respond to the challenges of technological developments in the world of education. This curriculum is designed with reference to the Indonesian National Qualifications Framework (KKNI) level 8, the National Standards for Higher Education, and the ever-evolving needs of society and the world of work. Each course in the curriculum is designed to support the achievement of graduate competencies, both in terms of knowledge, practical skills, attitudes, and critical and analytical thinking abilities.

The development and implementation of this curriculum are inextricably linked to the dynamics of scientific and technological developments, as well as input from stakeholders, including academics, practitioners, alumni, and graduate users. Therefore, regular evaluation and refinement of the curriculum will be conducted to ensure its relevance, quality, and sustainability.

Finally, we sincerely hope that this curriculum can serve as a comprehensive reference for lecturers, students, and the entire academic community in realizing a master's degree program that is superior, adaptive, and has a positive impact on the advancement of Indonesian education.

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