Doctorate of Education - Educational Technology

PROGRAM DESCRIPTION

The Doctor of Education (EdD) degree is offered to professionals who desire advanced postgraduate training with academic preparation for the highest levels of educational practice; Its focus is on deepening educational research in different areas of knowledge through the use of Information and Communication Technologies (ICT) as tools of Learning and Knowledge Technologies (LKT) and Empowerment and Participation Technologies (PET), enhancing learners' exploration, development and application of their academic, research and social competencies in different educational contexts.

The Doctorate in Education at UNAD Florida, examines how new technologies will shape future education and prepare students to become educational leaders who strategically manage and lead processes related to the integration of technology in diverse learning environments. The focus is on the tactical strategies needed to use technologies for the development of educational communities. Students will be challenged to investigate the strategic, academic and social implications of emerging technology in education with the possibility of communicating or publishing their research advances in specific areas of knowledge.

PROGRAM OBJECTIVES

The Doctorate in Education contributes to the training of high-quality researchers with a critical and collaborative vision who contribute to the social construction of new knowledge by solving national and international problems through innovation with the use and application of learning and knowledge technologies (LKT), information and communication technologies (ICT) and technologies for empowerment and participation (TEP) as fundamental pillars in the general educational field.

The program objectives can be categorized into 3 core frames:

ANALYTICAL (PO1)	Students will develop critical thinking for the management of educational problems related to technology in multi-contexts for the management and social appropriation of knowledge.
COMMUNICATIVE (PO2)	Students will build new knowledge and significant experiences related to educational training and management that allow the transfer of knowledge and technology in diverse social environments for the improvement of people's quality of life.
RESEARCH (PO3)	Students will innovate in high-impact research and social knowledge production processes related to technology in training and educational management environments.

PROGRAM LEARNING OUTCOMES

The Program Outcomes describe what students will be able to demonstrate in terms of knowledge, skills, and values after the completion of the program.

Upon completion of this program, students will be able to:

- Design research proposals in the area of education from the use and application of information and communication technologies to promote critical thinking, impacting their communities from the building and social appropriation of knowledge.
- Discuss concepts, theoretical models and theories in the area of education for the management and social appropriation of knowledge through the mastery of information and communication technology tools.
- Value educational theories proposing diverse scenarios that allow demonstrating and visualizing academic solvency to solve problems of educational processes with the use of information and communication technologies.
- Generate scientific communication through productivity derived from the design and implementation of research processes in education applied to information and communication technology environments.

INSTITUTIONAL OUTCOMES

Institutional Outcomes (IO) are the knowledge, skills, abilities, ideas, values, and qualities that the institution as a whole expects students to acquire from their overall experiences in all areas of the institution, including programs, courses, and student services, throughout their careers.

UNAD Florida Institutional Outcomes are:

Institutional Outcome 1 (IO1)	**Performance and Knowledge:** The ability to gather and analyze relevant information, evaluate alternatives, and develop creative and effective solutions to issues coming from the workplace or institutions at local and global communities.
Institutional Outcome 2 (IO2)	**Communication and Writing:** The ability to express and exchange ideas through listening, speaking, reading, and writing using credible and relevant sources to support those modes of interpersonal expressions.
Institutional Outcome 3 (IO3)	**Dedication, Commitment, and Discipline:** The ability to complete work accurately with attention to detail, give and receive feedback, and become independent learners with the necessary skills for social, economic, and emotional health. By applying the proper reasoning method, students can analyze and explain real-world issues.

PROGRAM COMPETENCIES

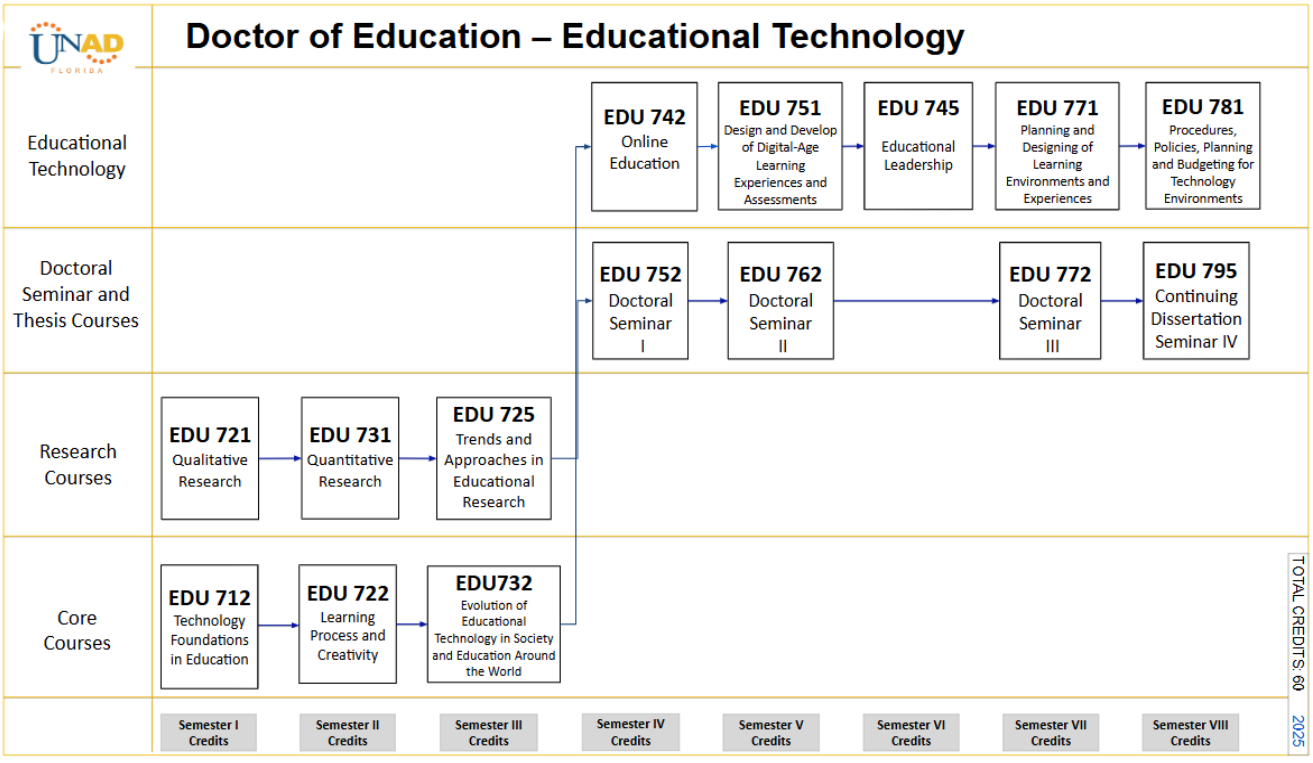
- Train critical and solidary researchers in the educational field in their specific areas of knowledge, consolidating scientific academic communities.
- Contribute to the community of knowledge through high impact academic production in the areas of education with the use of information and communication technologies.
- Consolidate lines and groups of research in the educational field through the formulation and application of research projects focused on the planning, design, implementation, and evaluation of educational environments through the use of information and communication technologies.
- Manage academic and scientific production through the creation of knowledge networks with national and foreign institutions.

EVALUATION INDICATORS

The activities used to demonstrate that students have achieved the goals of this program include:

- Policy assessment for the planning, design, development and evaluation of educational technology environments.
- Evaluation of legal and ethical aspects of the design, development, and evaluation of educational technology environments.
- Academic production based on theoretical, methodological, and research arguments in education applied to technological educational environments.
- Proficiency in oral and written academic communication from the educational foundations for the use of educational technology.
- Development of research with appropriate methodologies based on the epistemological approach of educational sciences.

COURSES - PLAN OF STUDY: 60 Credits



LIST OF COURSES

EDU 712	Technology Foundations in Education	EDU 745	Educational Leadership
EDU 721	Qualitative Research	EDU 752	Doctoral Seminar I
EDU 722	Learning Process and Creativity	EDU 731	Quantitative Research I
EDU 725	Trends and Approaches in Educational Research	EDU 762	Doctoral Seminar II
EDU 732	Evolution of Educational Technology in Society and Education around the world.	EDU 771	Planning and Designing of Learning Environments and Experiences
EDU 742	Online Education	EDU 772	Doctoral Seminar III
EDU 751	Design and Development of Digital-Age Learning Experiences and Assessments	EDU 795	Continuing Dissertation Seminar IV
		EDU 781	Procedures, Policies, Planning, and Budgeting for Technology Environments

COURSE DESCRIPTIONS

EDU712 Technology Foundations in Education (4 credits)

This course studies the foundations of technology in the field of education. It also analyzes the responsibilities and commitment required for students and teachers, and introduces concepts of digital citizenship and responsibility and transitioning instruction to integrate technology. This course also addresses portfolio use both professionally and with students. Technology dispositions, expectations, and guidelines are emphasized for what is necessary to be a 21st century educator.

EDU721 Qualitative Research (4 credits)

This research course provides students with core knowledge and skills for designing qualitative research at the doctoral level, including understanding data analysis. Students explore the nature of qualitative inquiry, fieldwork strategies and the nature of observation, theoretical approaches to qualitative research, the importance of quality assurance, and the ethical, legal, and social change implications of conducting qualitative research and producing knowledge. Students use software to code data and interpret and present results. Students will apply and synthesize their knowledge and skills by developing a qualitative research plan. Project components include planning, research ethics and access, data collecting and analyzing, and research reporting.

EDU722 Learning Process and Creativity (4 credits)

In this course students have the opportunity to get immersed in deep questions about learning, discussing the most provocative aspects, such as: What should be the true purpose of education? Do classrooms make sense anymore? What should individuals contribute to their own education? Are yesterday's distinctions between subjects--and between the arts and sciences--still meaningful? What would the ideal lifelong education look like at the K-12 level, in universities, in the workplace, and beyond?. **Prerequisite**: EDU712.

EDU731 Quantitative Research I (4 credits)

This research course provides students with core knowledge and skills for designing quantitative research at the doctoral level, including understanding data analysis and applying statistical concepts. Students explore classical quantitative research designs and common statistical tests, the importance of quality assurance, and ethical and social change implications of conducting quantitative research and producing knowledge.

This course approaches statistics from a problem-solving perspective with emphasis on selecting appropriate statistical tests for a research design. Students use statistical software to calculate statistics and interpret and present results. Students will apply and synthesize their knowledge and skills by developing a quantitative research plan.

Over the course of the industrial revolution, motors shrank in size and cost, disappearing inside household appliances and workplace tools to create new kinds of machines. Through a similar process, we are now embedding computers and telecommunications into our everyday context of education. The purpose of this course is to study the evolution of educational technology and what has been the impact of this evolution in our society and on education around the world. Students will get immersed in the new messages emerging from this evolution that can dramatically improve instructional outcomes, but such an evolution of educational practice depends on careful design of the interface among the devices, learners, and teachers. In this way, educational technology leaders demonstrate an advanced understanding of technology, the new concepts and their implication for teachers, and the evolution of technology in education, all of which form an intercultural point of view about the future of educational technology around the World.

Prerequisite: EDU721

EDU 732 Evaluation of Educational Technology in Society and Education Around the World

The course Evaluation of Educational Technology in Society and Education Around the World, in view of the concurrence in the vision of entities and actors (Organization of the United Nations -ONU-, 1948, the United Nations Educational, Scientific and Cultural Organization -UNESCO-, 1995, and the well-known Report Delors, 1996) which indicate that, throughout the world, the purpose of education is the development of personality, together with the strengthening of moral values, the democratic coexistence of the citizen framed in a culture of

peace , environmental protection and care, respect for cultural diversity, the development of creativity and productivity; highlights the high expectations of system modernization in this mission. In this sense, estimate the value of educational technology in the development of knowledge and skills in educational institutions of today's society, marked by the advancement of Information and Communication Technologies, and yet full of inequalities and sometimes questionable values in terms of quality life and responsibility with future generations, implies recognizing their role in the empowerment of the most vulnerable, the transcendence of borders and the establishment of common frameworks of understanding in the midst of natural divergences between different cultures.

In this course, it is essential that the student has a comprehensive and interpretive reading level, for which the following guidelines are put into consideration: Look for the most favorable environmental conditions for the study, which will facilitate your concentration and learning; make a study schedule that you must follow in a systematic way and remember to interpret in your own words the concepts presented by the author, this will allow a greater understanding of the subject. In this course Evaluation of Educational Technology in Society and Education Around the World, technological resources as an active and interactive medium play a preponderant role, ensuring communication between the facilitator and the participant.

Prerequisite: EDU722

EDU741 Quantitative Research II (4 credits)

This research course builds upon knowledge and skills acquired in Quantitative Research I and provides experience applying them. It provides students with more specialized knowledge and skills for designing quantitative research at the doctoral level, including understanding multivariate data analysis and applying more advanced statistical concepts. Students explore comprehensive quantitative research designs and suitable statistical tests, the importance of quality assurance, and ethical considerations and social change implications of conducting quantitative research and producing knowledge. This course approaches statistics from a problem-solving perspective with an emphasis on selecting the appropriate research design and statistical tests for more complex research questions or problems. Students use statistical software to perform analyses and interpret and present results. Students will apply and synthesize their knowledge and skills by developing a quantitative research plan.

Prerequisite: EDU731

EDU742 Online Education (4 credits)

Years ago, online education was unthinkable, today it is considered just as valid and for the disciplined learner. The internet has opened a world of limitless potential and created a boundary less society. This course discusses the history of online education and its future and how it educational technology has grown due to the rise of online education.

Prerequisite: EDU732.

EDU751 DESIGN AND DEVELOPMENT OF DIGITAL-AGE LEARNING EXPERIENCES AND ASSESSMENTS (4 CREDITS)

Students will design, develop, and evaluate authentic learning experiences and assessments by incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes necessary for students. **Prerequisite**: EDU742.

EDU752 Doctoral Seminar I (4 credits)

The seminar I is intended to deal with very precise aspects that are required to carry out an investigation and subsequently register a report of it. For the participant in a Doctorate in Education it is essential to handle in-depth concepts such as: philosophy, anthropology, epistemology, heuristics, hermeneutics, nosology, genealogy, ontology, and pedagogy. From the previous conceptualizations, each researcher will be able to analyze the relationship that these have with their area of professional competence and review the evolutionary historical context of its epistemology. It is also essential that we proceed to the task of recognizing the characteristics that identify a theory or a theoretical scientific model and differentiate them from a conceptualization. All this information will enrich previous knowledge and will induce data collection, which is very important and requires that we distinguish between what is a data collection technique and what is an instrument, in any type of research. So that later those data can be analyzed and interpreted, establishing the difference between these two procedures. To finish with the procedure of drawing conclusions. **Prerequisite**: EDU741

EDU761 Legal and Ethical Issues in Educational Technology (4 credits)

Students understand local and global societal issues and responsibilities in an evolving digital culture and

exhibit legal and ethical behavior in their professional practices. **Prerequisite**: EDU751

EDU762 Doctoral Seminar II (4 credits)

The course of Seminar II of the Doctorate in Education is a central space to plan and structure his Doctoral Prospectus, for which it will develop the following Chapters: I. The problem and / or the nature of the research topic and II. Theoretical framework. This Doctorate II Seminar will allow the participant to approach and present a broad and dense depth in the epistemological and theoretical content. In this course the constitutive aspects of a problem will be developed, in the phase of selection of the research object and the general or specific research objectives or purposes will be formulated. The Report of Chapter I will be presented, addressing the constitutive aspects according to the structure according to the selected, qualitative, quantitative and/or holistic approach. In addition, in this course Chapter II will be developed, based on the theories, theoretical approaches, investigations and general background that are considered valid for the correct setting of the study. Theoretical Perspective, known as process and product that will lead the intellectual production of a research report, in this case of the Doctoral Prospectus. **Prerequisite**: EDU752.

EDU771 Planning and Designing Learning Environments and Experiences (4 credits)

Doctoral students will plan, design, and model effective learning environments and multiple experiences using technology to support the diverse needs of students. **Prerequisite**: EDU761

EDU772 Doctoral Seminar III (4 credits)

The Doctorate Course III Seminar in Education is a central space for the doctoral student to plan and structure their Doctorate Proposal, it aims to become a transdisciplinary curricular space that introduces participants to the way and nature of knowing epistemological aspects, technical and methodological that reflects the management and mastery of investigative skills. This course will address the methodological aspects that will lead to research design, based on a research plan, structure and strategy designed to obtain answers to research questions or problems. The plan is the outline or complete program; it includes the operationalization of the variables and the construction of instruments to collect data that allow testing hypotheses and analyzing the results. Building a research instrument or tool is an extremely important aspect of a research project because everything you say by way of findings or conclusions is based on the type of information you collect. The purpose of this Seminar is to generate an instance of on-site production. It allows the exchange of experiences, obstacles, successes and strategies used in different tasks linked to the analytical activity, the identification of findings and the writing of the thesis plan. The Doctoral Proposal clearly establishes the activities that will be carried out and the resources that are required to achieve the objectives or purposes. It is therefore necessary to organize ideas, define what, why and what to investigate. **Prerequisite**: EDU762.

EDU795 Continuing Dissertation Seminar IV

The Doctorate IV Seminar in Education is a course that offers an instrumental view of the Doctoral Thesis, according to the chapters and aspects of the selected approach: quantitative, qualitative and/or holistic. It offers a complex, integral, experiential, synectic, investigative vision. More than the specific content problems of each participant, offers a review of epistemological, axiological and global methodologies. It is hoped that the curricular unit will allow the development of academic competences accompanied by systematic training that contributes to the critical opening and constant revision of established knowledge, both in the positive sciences, and in the emerging post-positivist sciences. In this Doctoral Seminar IV, high-level intellectual production must be concluded; that is, the Doctoral Thesis, in order to present it before a highly qualified jury. A doctoral thesis is the expression of an interactive process in which the researcher configures an argumentative discourse with conclusive approaches. In this sense, it is expected to constitute a well-founded discourse that involves the production of a new knowledge or alternative knowledge to the state of art and the issue, related to the problematization of a relevant thematic axis. **Prerequisite**: EDU772

EDU781 PROCEDURES, POLICIES, PLANNING, AND BUDGETING FOR TECHNOLOGY ENVIRONMENTS (4 CREDITS)

The focus of this course is to coordinate, develop and directly implement technology infrastructure procedures, policies, plans, and budgets for PK-12 schools, or for schools where students work.**Prerequisite**: EDU771.