

Master of Science Program In Digital Technology Management

1. Name of Program

Thai : หลักสูตรวิทยาศาสตรมหาบัณฑิต สาขาวิชาการจัดการเทคโนโลยีดิจิทัล

English: Master of Science Program in Digital Technology Management

2. Name of Degree

Thai : Full Title วิทยาศาสตรมหาบัณฑิต (การจัดการเทคโนโลยีดิจิทัล)

Abbreviation วท.ม. (การจัดการเทคโนโลยีดิจิทัล)

English : Full Title Master of Science (Digital Technology Management)

Abbreviation M.S. (Digital Technology Management)

3. Period of Study

For a student with a Master of Science Degree both type 2 and 3, the program is designed to be 2 academic years, and the period of study shall not exceed 5 academic years

4. Tuition Fees in Program/person

Tuition fees for the duration of the four semesters are charged on a lump sum basis of Baht;
Thai Students

- Type 2 (Regular Plan) 100,000 for the whole degree program or Baht 25,000 per semester.
- Type 3 (Irregular Plan) 160,000 for the whole degree program or Baht 40,000 per semester.

International students

- Type 2 (Regular Plan) and 3 (Irregular Plan) 200,000 for the whole degree program or Baht 50,000 per semester. (International Student)

5. Curriculum Structure

Type 2 (Plan A Type A2)

Degree Requirements		36	credits
A. Coursework	a minimum of	24	credits
1. Graduate Courses	a minimum of	24	credits
1.1 Field of Specialization	a minimum of	24	credits
1.1.1 Required courses		9	credits
959701 Digital Transformation		3	credits
959702 Software Project Management and Change Management		3	credits

959790 Research Methodology in Digital Technology 3 credits
Management

1.1.2 Elective courses a minimum of 15 credits

(A) Field of concentration courses 9 credits

Select at 1 Study area from the following track course

Study Area 1: Modern Management and Information Technology

959711 Introduction to Digital business 3 credits

959712 Data-Driven Enterprise 3 credits

959714 Digital Analytics in Digital Business 3 credits

Study Area 2: Digital Health

959721 Digital Transformation for Health Industry 3 credits

959722 Artificial Intelligence for Health Industry 3 credits

959723 Internet of Things for Health Industry 3 credits

Study Area 3: Education Technology

955731 Design Technology and Educational Innovation 3 credits
Development

955732 Educational Digital Game 3 credits

955733 Virtual World Technology for Educational 3 credits

Study Area 4: Cross-Border E-Commerce

959714 Digital Analytics in Digital Business 3 credits

959731 Cross-Border Electronic Commerce 3 credits

959732 Business Startup for Chinese-Thai Cross-Border 3 credits
E-Commerce

Study Area 5: Digital Game

959741 Educational Game Design 3 credits

959742 Game Theory for Artificial Intelligence 3 credits

959743 User Experience Research for Digital Games 3 credits

959744 Mixed Reality and Virtual World 3 credits

Study Area 6: Animation and Visual Effect

959745 Aesthetics, Theory and Practice in Animation and 3 credits
Visual Effects

959746 Situating Practice Professionalism Skills in 3 credits
Animation and Visual Effects

959747 Efficiency Enhancement of Animation and Visual 3 credits
Effects Production

Study Area 7: Tourism Technology

959713 Artificial Intelligence in Digital Business 3 credits

959715 Tourism Informatics 3 credits

959716 Application Technology in MICE Industry 3 credits

(B) Elective courses or other graduate courses under the

recommendation of program administrative committee a minimum of

6 credits

955731 Design Technology and Educational Innovation 3 credits
Development

955732 Educational Digital Game 3 credits

955733 Virtual World Technology for Educational 3 credits

959703 Usability of Digital Technology 3 credits

959711 Introduction to Digital business 3 credits

959712 Data-Driven Enterprise 3 credits

959713 Artificial Intelligence in Digital Business 3 credits

959714 Digital Analytics in Digital Business 3 credits

959715 Tourism Informatics 3 credits

959716 Application Technology in MICE Industry 3 credits

959721 Digital Transformation for Health Industry 3 credits

959722 Artificial Intelligence for Health Industry 3 credits

959723 Internet of Things for Health Industry 3 credits

959731 Cross-Border Electronic Commerce 3 credits

959732 Business Startup for Chinese-Thai Cross-Border 3 credits
E-Commerce

959741 Educational Game Design 3 credits

959742 Game Theory for Artificial Intelligence 3 credits

959743 User Experience Research for Digital Games 3 credits

959744 Mixed Reality and Virtual World 3 credits

959745 Aesthetics, Theory and Practice in Animation and 3 credits
Visual Effects

959746 Situating Practice Professionalism Skills in 3 credits
Animation and Visual Effects

959747 Efficiency Enhancement of Animation and Visual 3 credits
Effects Production

959771 Customer Centric Digital Transformation 3 credits

959772 Smart Logistics in Digital Business 3 credits

959773 Simulation-Based case Studies in Logistics 3 credits

959774 Digital Infrastructure 3 credits

959775 Digital Solution 3 credits

959776 Digital Process 3 credits

959777 Internet of Things in Digital Business 3 credits

959778	Innovative Thinking in Digital Business	3	credits
959779	Digital Innovation in Education	3	credits
959789	Selected Topics in Digital Technology Management	3	credits
959795	Pre-Research	3	credits

1.2 Other courses

The student may enroll other graduate courses(s) under the agreement of the advisor.

2. Advanced Undergraduate Courses

In case the student lacks some basic knowledge which is necessary for education, the student must enroll some advanced undergraduate courses(s) under the recommendation of program administrative committee.

B. Thesis

959799	Master’s Thesis	12	credits
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C. Non-credit Courses

1. Graduate School requirement: a foreign language
2. Program requirement - none -

D. Academic Activities

1. A student has to organize seminar and present paper on the topic related to his/her thesis for 1 time(s) in every semester for at least 2 semesters and students have to attend seminar every semester that the course is offered.
2. At least 1 master’s thesis work or a part of master’s thesis work must be published or at least accepted to publish in a national journal listed in TCI Tier 1 database or full paper publication in an international conference proceedings accepted by the field of study or have patent. Publication of thesis work must specify student as the first author.

Type 3 (Plan B)

Degree Requirements	a minimum of	36	credits
A. Coursework	a minimum of	30	credits
1. Graduate Courses	a minimum of	30	credits
1.1 Field of Specialization	a minimum of	30	credits
1.1.1 Required courses		9	credits
959701 Digital Transformation		3	credits
959702 Software Project Management and Change Management		3	credits
959703 Usability of Digital Technology		3	credits
1.1.2 Elective courses	a minimum of	21	credits

(A) Field of concentration courses 9 credits

Select at 1 Study area from the following track course

Study Area 1: Modern Management and Information Technology

959711	Introduction to Digital business	3	credits
959712	Data-Driven Enterprise	3	credits
959714	Digital Analytics in Digital Business	3	credits

Study Area 2: Digital Health

959721	Digital Transformation for Health Industry	3	credits
959722	Artificial Intelligence for Health Industry	3	credits
959723	Internet of Things for Health Industry	3	credits

Study Area 3: Education Technology

955731	Design Technology and Educational Innovation Development	3	credits
955732	Educational Digital Game	3	credits
955733	Virtual World Technology for Educational	3	credits

Study Area 4: Cross-Border E-Commerce

959714	Digital Analytics in Digital Business	3	credits
959731	Cross-Border Electronic Commerce	3	credits
959732	Business Startup for Chinese-Thai Cross-Border E-Commerce	3	credits

Study Area 5: Digital Game

959741	Educational Game Design	3	credits
959742	Game Theory for Artificial Intelligence	3	credits
959743	User Experience Research for Digital Games	3	credits
959744	Mixed Reality and Virtual World	3	credits

Study Area 6: Animation and Visual Effect

959745	Aesthetics, Theory and Practice in Animation and Visual Effects	3	credits
959746	Situating Practice Professionalism Skills in Animation and Visual Effects	3	credits
959747	Efficiency Enhancement of Animation and Visual Effects Production	3	credits

Study Area 7: Tourism Technology

959713	Artificial Intelligence in Digital Business	3	credits
959715	Tourism Informatics	3	credits
959716	Application Technology in MICE Industry	3	credits

(B) Elective courses or other graduate courses under the
 recommendation of program administrative committee a minimum of
 12 credits

955731	Design Technology and Educational Innovation Development	3	credits
955732	Educational Digital Game	3	credits
955733	Virtual World Technology for Educational	3	credits
959711	Introduction to Digital business	3	credits
959712	Data-Driven Enterprise	3	credits
959713	Artificial Intelligence in Digital Business	3	credits
959714	Digital Analytics in Digital Business	3	credits
959715	Tourism Informatics	3	credits
959716	Application Technology in MICE Industry	3	credits
959721	Digital Transformation for Health Industry	3	credits
959722	Artificial Intelligence for Health Industry	3	credits
959723	Internet of Things for Health Industry	3	credits
959731	Cross-Border Electronic Commerce	3	credits
959732	Business Startup for Chinese-Thai Cross-Border E-Commerce	3	credits
959741	Educational Game Design	3	credits
959742	Game Theory for Artificial Intelligence	3	credits
959743	User Experience Research for Digital Games	3	credits
959744	Mixed Reality and Virtual World	3	credits
959745	Aesthetics, Theory and Practice in Animation and Visual Effects	3	credits
959746	Situating Practice Professionalism Skills in Animation and Visual Effects	3	credits
959747	Efficiency Enhancement of Animation and Visual Effects Production	3	credits
959771	Customer Centric Digital Transformation	3	credits
959772	Smart Logistics in Digital Business	3	credits
959773	Simulation-Based case Studies in Logistics	3	credits
959774	Digital Infrastructure	3	credits
959775	Digital Solution	3	credits
959776	Digital Process	3	credits
959777	Internet of Things in Digital Business	3	credits
959778	Innovative Thinking in Digital Business	3	credits
959779	Digital Innovation in Education	3	credits

959789	Selected Topics in Digital Technology Management	3	credits
959790	Research Methodology in Digital Technology Management	3	credits
959795	Pre-Research	3	credits

1.2 Other courses

The student may enroll other graduate courses(s) under the agreement of the advisor.

2. Advanced Undergraduate Courses

In case the student lacks some basic knowledge, which is necessary for education, the student must enroll some advanced undergraduate courses(s) under the recommendation of program administrative committee.

B. Thesis

953798	Independent Study	6	credits
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C. Non-credit Courses

1. Graduate School requirement : a foreign language
2. Program requirement - none -

D. Academic activities

At least 1 independent study work or part of independent study work must be published in CMU Graduate Journal or in other academic publication approved by the field of study and the graduate school with the student as the first author.

E. Comprehensive Examination

Having submitted a request form to the Graduate School, approved by general advisor or major thesis advisor, a student must then complete a comprehensive examination.

6. Study Plan

Type 2: Thesis (Total 36 Credits)

1st year

First Semester		credits	Second Semester		credits
959701	การแปลงเป็นดิจิทัล Digital Transformation	3	959790	ระเบียบวิธีวิจัยทางการจัดการ เทคโนโลยีดิจิทัล Research Methodology in Digital Technology Management	3
959702	การบริหารโครงการและการบริหารการ เปลี่ยนแปลงซอฟต์แวร์ Software Project Management and Change Management	3	xxxxxx	กระบวนวิชาเลือก Elective courses	3
xxxxxx	กระบวนวิชาเลือก Elective courses	3	xxxxxx	กระบวนวิชาเลือก Elective courses	3
xxxxxx	กระบวนวิชาเลือก Elective courses	3	xxxxxx	กระบวนวิชาเลือก Elective courses	3
	กิจกรรมปรับพื้นฐาน (สำหรับนักศึกษาที่ ไม่มีพื้นฐานทางด้านเทคโนโลยีสารสนเทศ) Basic adjustment activities , For students who do not have basic information technology	-		จัดสัมมนา/เข้าร่วมการสัมมนา/นำเสนอ ผลงานในการสัมมนา Organize seminar/ Attend seminar/present paper	-
				สอบผ่านเงื่อนไขภาษาต่างประเทศ Pass - a foreign language	-
Total		12	Total		12

2nd years

First Semester		credits	Second Semester		credits
959799	วิทยานิพนธ์ปริญญาโท Master's Thesis	9	959799	วิทยานิพนธ์ปริญญาโท Master's Thesis	3
	เสนอหัวข้อโครงร่างปริญญาโท Present thesis proposal	-		สอบปริญญาโท Thesis defense	-
	จัดสัมมนา/เข้าร่วมการสัมมนา/นำเสนอ ผลงานในการสัมมนา Organize seminar/ Attend seminar/present paper	-			
Total		9	Total		3

Type 3: Independent Study (Total 36 Credits)

1st year

First Semester		credits	Second Semester		credits
959701	การแปลงเป็นดิจิทัล Digital Transformation	3	959703	การใช้ได้ของเทคโนโลยีดิจิทัล Usability of Digital Technology	3
959702	การบริหารโครงการและการบริหารการเปลี่ยนแปลงซอฟต์แวร์ Software Project Management and Change Management	3	xxxxxx	กระบวนวิชาเลือก Elective courses	3
xxxxxx	กระบวนวิชาเลือก Elective courses	3	xxxxxx	กระบวนวิชาเลือก Elective courses	3
xxxxxx	กระบวนวิชาเลือก Elective courses	3	xxxxxx	กระบวนวิชาเลือก Elective courses	3
	กิจกรรมปรับพื้นฐาน (สำหรับนักศึกษาที่ไม่มีพื้นฐานทางด้านเทคโนโลยีสารสนเทศ) Basic adjustment activities , For students who do not have basic information technology	-		เสนอหัวข้อโครงร่างวิทยานิพนธ์ Present thesis proposal	-
				สอบผ่านเงื่อนไขภาษาต่างประเทศ Pass - a foreign language	-
Total		12	Total		12

2nd years

First Semester		credits	Second Semester		credits
xxxxxx	กระบวนวิชาเลือก Elective courses	3	959798	การค้นคว้าอิสระ Independent Study	6
xxxxxx	กระบวนวิชาเลือก Elective courses	3		สอบการค้นคว้าอิสระ Independent Study Defense	-
	เสนอหัวข้อโครงร่างวิทยานิพนธ์ Present thesis proposal	-			
	จัดสัมมนา/เข้าร่วมการสัมมนา/นำเสนอผลงานในการสัมมนา Organize seminar/ Attend seminar/present paper	-			
	การสอบประมวลความรู้ Comprehensive Examination	-			
Total		6	Total		6

Course Description

ATGE 731 (955731) Design Technology and Educational Innovation Development 3(3-0-6)

Prerequisite: None

Principles, concepts, and theories in educational innovation design, Learning psychology and innovative educational design and development, Management of elements in educational innovation design, Processes, techniques, and methods for designing and developing innovative educational, Approaches for evaluating the use of technology and innovation for learning, Case studies on the application of technology and innovation for learning

ATGE 732 (955732) Educational Digital Game 3(3-0-6)

Prerequisite: GSBA 701 (926701) Technology and Digital Innovation in Education

Principle, concept, and theory of game, Game-Based Learning, Type of gamification to promote learning, Features of the digital educational game, Digital educational game design, Digital educational game development, Applying digital game to improve learning

ATGE 733 (955733) Virtual World Technology for Educational 3(3-0-6)

Prerequisite : GSBA 701 (926701) Technology and Digital Innovation in Education

Basic principles of Immersive Technology, Design principles for Augmented Reality learning, Design principles for Virtual Reality learning, Design principles for Mixed Reality learning, Application of Augmented Reality Technology in Education, Application of Virtual Reality Technology in Education, Application of Mixed Reality Technology in Education, Virtual world factor in Education

DTM 701 (959701) Digital Transformation 3(3-0-6)

Prerequisite: None

Introduction to the digital transformation, trends and impacts of technology, disruptive business model, digital transformation framework, digital strategy formulation, digital strategy implementation, digital risk management, cyber security, morality ethics and privacy, case study of digital transformation

DTM 702 (959702) Software Project Management and Change Management 3(3-0-6)

Prerequisite: None

Overview of project management, project planning, time and resource management, budget planning and cost control, project implementation, project quality control, project

management technology, change management, change resistant and response, leadership in digital transformation, corporate culture management for digital disruption, change management strategy for digital technology

DTM 703 (959703) Usability of Digital Technology **3(3-0-6)**

Prerequisite: None

Overview of usability of digital technology, usability design, rapid prototype development, user research, classification of usability tests, usability testing processes, planning for usability testing, testing environment preparation, testing materials preparation, conducting usability tests, test result analysis, reporting the findings

DTM 711 (959711) Introduction to Digital business **3(3-0-6)**

Prerequisite: None

Fundamental of business and economics, intellectual property, legal structure and contract, capital structuring, marketing for digital technology, financial management, organization management, business outsourcing, risk management for digital technology investment

DTM 712 (959712) Data-Driven Enterprise **3(3-0-6)**

Prerequisite: None

Overview of data driven operation and enterprise operation, enterprise activities, data-driven corporate culture, architecture of data processing, data processing, predefined instruction set for data manipulation and preprocessing; data manipulation; data cleansing; dimension reduction; feature selection, predefined instruction set for data processing; prediction; optimization; simulation, application of data processing

DTM 713 (959713) Artificial Intelligence in Digital Business **3(3-0-6)**

Prerequisite: None

Theory and discussion of artificial intelligence, 4th industry revolution's technology, human role in developing and deploying artificial intelligence, responsible artificial intelligence, skill for working with artificial intelligence, redesigning the business process using artificial intelligence, application of artificial intelligence in production and supply chain, application of artificial intelligence in corporate functions, application of artificial intelligence in research and develop for business, application of artificial intelligence in customer service, sales, and marketing, advanced application of artificial intelligence

DTM 714 (959714) Digital Analytics in Digital Business **3(3-0-6)**

Prerequisite: None

Current state of digital business, concepts of digital analytics, data analysis of owned media, data analysis of earned media, data analysis of paid media, marketing automation, service improvement using data analytics, conversational commerce, data analytics for product lifecycle, case studies of digital analytics in digital business

DTM 715 (959715) Tourism Informatics **3(2-2-5)**

Prerequisite: None

Introduction to digital technology in hospitality and tourism industry, technology acceptance, technology adoption, and smart destination, design science for hospitality and tourism, digital technology and innovation in value co-creation, digital technology and innovation in operation, digital technology and innovation in marketing, business analytics and traveler's behavior, digital technology and innovation development trends in hospitality and tourism

DTM 716 (959716) Application Technology in MICE Industry **3(2-2-5)**

Prerequisite: None

Introduction to mice Industry, component and concept of meeting, conference, exhibition and incentive travel, target market and marketing strategy for mice, innovation and digital technology in mice industry, digital technology and value chain in mice industry, trends of digital technology in mice industry, case study of application technology in mice industry

DTM 721 (959721) Digital Transformation for Health Industry **3(3-0-6)**
Data-Driven Enterprise

Prerequisite: None

Health industry ecosystem, digital disruption in health industry, health care platform, telehealth service, patient centric service design, agile approach for health service transformation, digital health service transformation strategy, digital transformation in aging society, case study of digital transformation in health industry

DTM 722 (959722) Artificial Intelligence for Health Industry **3(3-0-6)**
Digital Infrastructure

Prerequisite: None

Introduction to ai in health industry, digital health information system and technology, cloud-based technology for health care, data governance and visualization, data management in health care services, visualization techniques and tools for healthcare data, patient data

processing and storage, data processing techniques and tools, patient data protection, emerging topics in ai for health industry, use case of ai for health industry

DTM 723 (959723) Internet of Things for Health Industry 3(3-0-6)

Prerequisite: None

Introduction to iot in health industry, internet of medical things, iot architecture, endpoint devices for iot, edge computing, smart devices for health care professionals, iot healthcare applications and solutions, wearable devices for health care, data management and visualization in iot, and case studies of iot in health industry

DTM 731 (959731) Cross-Border Electronic Commerce 3(3-0-6)

Prerequisite: None

Introduction to the cross-border electronic commerce, cross-border electronic commerce platform, business process for cross-border electronic commerce, consumer behavior, market segmentation and marketing strategy, law and regulation, payment for cross-border electronic commerce, apply logistics, case study of cross-border electronic commerce

DTM 732 (959732) Business Startup for Chinese-Thai Cross-Border E-Commerce 3(3-0-6)

Prerequisite: None

Overview of chinese-thai business startup, elements of implementing a trade and service ecosystem, general models of cbec business online platform, business plan design for online business ecosystem, platform design for chinese-thai logistics business, platform design for chinese-thai service business, business platform design for chinese-thai service industry, online business platform for china-thailand trade

DTM 741 (959741) Educational Game Design 3(3-0-6)

เงื่อนไขที่ต้องผ่านก่อน : ไม่มี

Prerequisite: None

Principle of educational game design, theory of educational game design, categorizing game design elements for educational games, model of educational game design, educational game design for online education, application of educational games in the research, case studies of educational games

DTM 741 (959741) Educational Game Design 3(3-0-6)

Prerequisite: None

Principle of educational game design, theory of educational game design, categorizing game design elements for educational games, model of educational game design, educational

game design for online education, application of educational games in the research, case studies of educational games

DTM 742 (959742) Game Theory for Artificial Intelligence **3(3-0-6)**

Prerequisite: None

Models and games for artificial intelligence, player preferences, types of game in game theory, simultaneous and sequential games, nash equilibrium in game theory, algorithms for decision-making in game, application of game theory in game development

DTM 743 (959743) User Experience Research for Digital Games **3(3-0-6)**

Prerequisite: None

Principle of user experience research for digital games, component analysis of digital games, player engagement experience design, elements of game structure, player journey design, player satisfaction testing, application of user experience for game productions

DTM 744 (959744) Mixed Reality and Virtual World **3(3-0-6)**

Prerequisite: None

Principle of mixed reality and virtual world, scene setup for the open-world landscape, object creation and animation for mixed reality and virtual world technology, conditional statement for mixed reality and virtual world development, character control for mixed reality and virtual world, devices for mixed reality and virtual world, case studies of mixed reality and virtual reality in digital content

DTM 745 (959745) Aesthetics, Theory and Practice in Animation and Visual Effects **3(3-0-6)**

Prerequisite: None

Principle of aesthetics, theory and practice for animation and visual effects, pre-production, production, post-production processes of animation and visual effects, knowledge development and creative thinking systematically in practice, theory, and professionalism, application of knowledge in arts and current animation techniques to generate income, the development of animation and visual effects industry guideline, ethical and moral issues in animation and visual effects

DTM 746 (959746) Situating Practice Professionalism Skills in Animation and Visual Effects 3(3-0-6)

Prerequisite: None

Concepts, principle and situating practices for animation and visual effects development, concepts and principle for pre-production, production and post-production in animation and visual effects, application of concepts, principle and situating practices for animation and visual effects development as a professional, new techniques development for animation and visual effects creations, application digital technology in animation and visual effects industry

DTM 747 (959747) Efficiency Enhancement of Animation and Visual Effects Production 3(3-0-6)

Prerequisite: None

Animation and visual effects prototype development, quality control process of animation and visual effects prototype, production of animation and visual effects, efficiency enhancement of animation and visual effects production, application of digital technology for marketing in animation and visual effects industry

DTM 771 (959771) Customer Centric Digital Transformation 3(3-0-6)

Prerequisite: None

Introduction to electronic commerce and digital marketing, the importance and principles of relationship management, digital communication reputation management and online customer engagement, customer centric in digital business, customer behavior in digital business. customer centric strategies in digital business, information technology in customer relationship management, influence and trends of customer centric in digital business, case study of customer centric in digital business

DTM 772 (959772) Smart Logistics in Digital Business 3(3-0-6)

Prerequisite: None

Overview of logistics, elements of logistics processes, general types of logistics information system, architecture of logistics information system, logistics data processing, identification system, reliability of logistics information system, prediction and optimization characteristics

DTM 773 (959773) Simulation-Based case Studies in Logistics 3(3-0-6)

Prerequisite: None

Statistical issues, conducting simulation studies, material handling system, road transportation, water transportation, airport logistics operations

DTM 774 (959774) Digital Infrastructure **3(3-0-6)**

Prerequisite: None

Overview of the digital infrastructure, requirement for digital infrastructure, internet-of-thing, on-demand digital infrastructure, data storage technology, data center, information sharing technology, requirement-defined infrastructure, digital infrastructure security

DTM 775 (959775) Digital Solution **3(3-0-6)**

Prerequisite: None

Overview of digital solution, internet-of-thing in business, data analytics, business intelligence and information dashboard, digital marketing, digital financial technology, information sharing platform, enterprise resource planning and management, supportive technology for industry, solution optimization, ethics in digital technology, case studies of digital solution

DTM 776 (959776) Digital Process **3(3-0-6)**

Prerequisite: None

Overview of digital solution development process, problem identification, solution development planning, constraint identification, solution architecture and design, solution development, solution deployment and maintenance, solution success evaluation, quality assurance of digital solution, advanced topics in digital solution development process

DTM 777 (959777) Internet of Things in Digital Business **3(3-0-6)**

Prerequisite: None

Current state of internet of things, architecture of internet of things, endpoint devices, communication among connected devices, visualization of internet of things data, insight discovery and data analysis with internet of things, business process improvement using internet of things, business risks of internet of things, ethical issues of internet of things, case studies of internet of things in digital business

DTM 778 (959778) Innovative Thinking in Digital Business **3(3-0-6)**

Prerequisite: None

Introduction of innovative thinking in digital business, clarify and select challenge innovation issues, innovation ideation, tools and techniques in innovative thinking processes, innovative idea evaluation, innovation prototyping, prototype testing and innovation implementation

DTM 779 (959779) Digital Innovation in Education 3(3-0-6)

Prerequisite: None

Introduction to digital innovation in education, transforming education through technology, technology-supported cooperative and collaborative education, technology-supported probing students' understanding, designing innovations to enhance learning. developing innovations to enhance learning. technology supported evaluation of innovation education, morality and ethics in development of innovation for education, seminar for digital innovation in education

DTM 789 (959789) Selected Topics in Digital Technology Management 3(3-0-6)

Prerequisite: None

Intensive study of current interesting topics and new development in various fields of digital technology management.

DTM 790 (959790) Research Methodology in Digital Technology Management 3(3-0-6)

Prerequisite: None

Principles of research methodology, aspects of ethics and quality control in scientific works, tools of research, formulating research problems, review of related literature, writing the research proposal, conducting research in digital technology management, rules and principles in writing research report

DTM 795 (959795) Pre-Research 3(3-0-6)

Prerequisite: None

Overview of research in digital technology. Research planning. Problem selection. Literature review technique. Feasibility study. Statistical techniques for research. Project proposal development. Proposal presentation. Grading will be given on satisfactory (S) or unsatisfactory (U) basis.

DTM 798 (959798) Independent Study 6 Credits

Prerequisite: Approved thesis proposal or registration concurrently with submission of thesis proposal

DTM 799 (959799) Master's Thesis 12 Credits

Prerequisite: Approved thesis proposal or registration concurrently with submission of thesis proposal