THAMMASAT
DESIGN SCHOOL

IMAGINE - COLLABORATE - CREATE

DBTM

DESIGN, BUSINESS & TECHNOLOGY MANAGEMENT

WELCOME
TO
DBTM
THAMMASAT!

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Bachelor's & Master's Program in Design, Business & Technology Management

Design has a new role to play in addressing the world's ever more complex challenges and is moving from a largely "additive" to a "transformative" role.

The essence of the design process is becoming an increasingly important component, not only of the classical design arts, but is spreading into technology and business sectors.

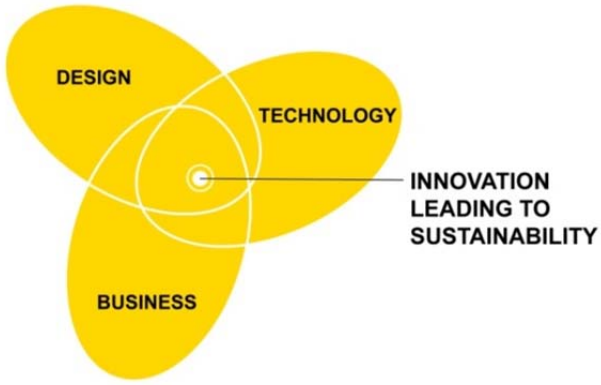
The new business and economic models and ever-expanding global connections require a new generation of creative thinkers that can design, manage and anticipate our needs.

What is DBTM?

The integrated Bachelor's and Master's Program in Design, Business & Technology Management (DBTM) at Thammasat University is a joint effort of the Faculty of Architecture & Planning, and Thammasat Business School, in collaboration with the School of Engineering & Environment at Northumbria University in England, School of Design at the Hong Kong Polytechnic University, ELISAVA School of Design and Engineering in Barcelona.

The intent of the program is to teach students not only how to create innovative products, services, and strategies, but also how to help organizations develop new business models for the future. DBTM's mission is to nurture a new generation of professional pioneers that have the vision and the skills needed to respond to the challenges of our increasingly complex global society in a sustainable and ethical manner.

The DBTM program bridges the disciplines of design, business and technology management and focuses on interdisciplinary collaboration and the integration of design thinking in all levels of strategy, planning and management. It emphasizes the importance of design as a core factor for innovation while developing a broader range of competencies in order to promote a deeper understanding of transformative issues that are affecting innovation.



How is the program taught?

The integrated DBTM program is a 3.5-year bachelor's and a 1.5-year master's program.

It encompasses a wide array of courses that emphasize interdisciplinary collaboration, hands-on experience and the integration of design thinking in all aspects of the curriculum. Free elective studies are chosen from the curriculum offered by Thammasat University; other alternatives include exchange programs at one of the partner universities.

The three-and-a-half-year bachelor's curriculum incorporates a wide array of courses such as History of Art, Value Creation Economics, Storytelling and Visual Communication, Psychology for Design, Design Business and Industry, Marketing Research, Social Innovation and Social Entrepreneurship, Design and Materials, Environmental Technology, Production Design, Information Technology and

Management, and the core innovation workshops such as Inclusive Design Innovation, Eco-Design Innovation, Service Design Innovation, and Social Innovation and Social Entrepreneurship.

DBTM will also bring together the most experienced educators and practitioners from different innovative organizations and businesses. With these academic-corporate partners, students will have an opportunity to learn and collaborate with an exclusive and diverse network while exploring potential career paths for practical internship.

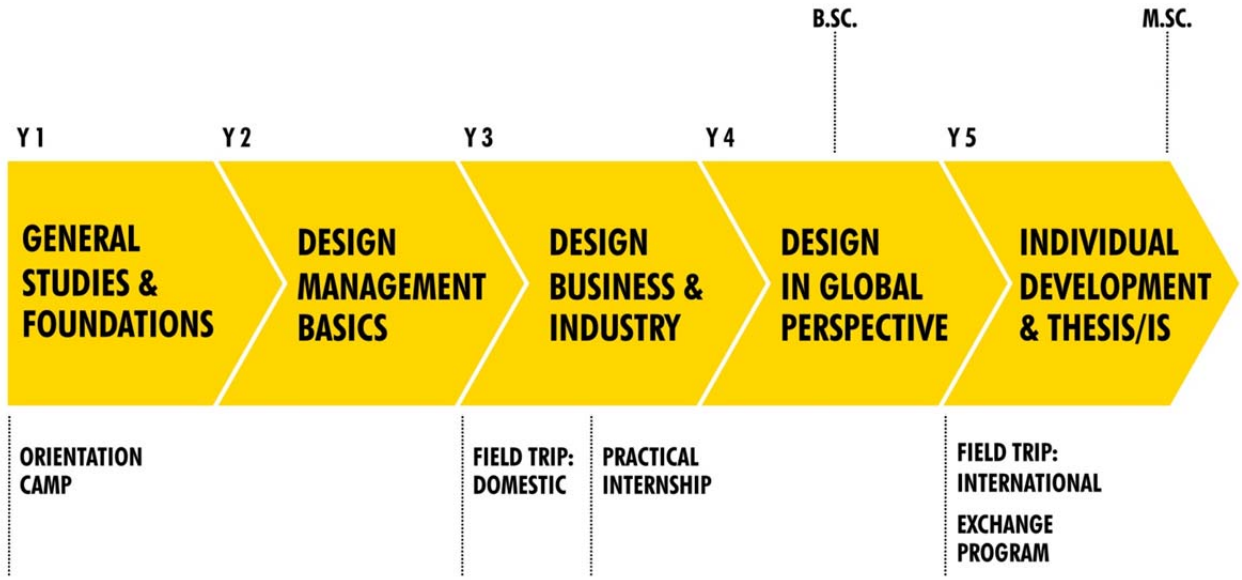
The one-and-a-half-year master's program provides the students with the opportunity to focus in more depth on issues such as sustainability, research methodologies and management before integrating the acquired knowledge in their final thesis/ individual study. At the master's level, students will have the opportunity to join exchange programs with an international partner university or institution.

DBTM nurtures a creative learning experience through discussion-based courses, case studies, and project-based learning, emphasizing both individual and team work.

What are the career prospects?

DBTM students will graduate with a solid foundation in design, business and technology management which enables them to create their own career trajectory rather than following established paths. The combination of conceptual, technical and managerial skills enables them to conceptualize and shape innovative solutions, which in turn ensure the competitiveness of the business they work in.

Graduates can enjoy a range of career opportunities, including starting their own businesses, managing creative projects and design-driven organizations, incubating and developing new products, services and business strategies, and becoming innovative leaders in the emerging creative economy.



Curriculum Advisory Committee:

Faculty of Architecture and Planning, Thammasat University

Thammasat Business School, Thammasat University

Kasikorn Bank

Department of International Trade Promotion, Ministry of Commerce

Academic Partners:

School of Engineering and Environment, Northumbria University Newcastle, U.K.

School of Design, the Hong Kong Polytechnic University, Hong Kong

School of Design and Engineering, ELISAVA, Barcelona, Spain

Friends of DBTM:

Learning Modules (From Academic Year 2018)

Year 1 : Term 1	Credit	Year 1 : Term 2	Credit	Summer	Credit	Total
Module: Foundations		**Module: Art and Design**				
TU 101 Thailand, ASEAN, and the World	3	TU 105 Communication Skills in English	3			
TU 102 Socials Life Skills	3	TU 106 Creativity and Communication	3			
TU 104 Critical Thinking, Reading, and Writing	3	AP 165 Value Creation Economy	3			
AP 163 History of Art	3	DBT 222 Accounting and Financial Information for Decision Making	3			
DBT 211 Design in Everyday Life	3	DBT 212 Aesthetic and Form	3			
TU155 Elementary Statistic	3	DBT 241 Storytelling and Visual Communication	3			
Subtotals	**18**		**18**			**36**
Year 2 : Term 1	**Credit**	**Year 2 : Term 2**	**Credit**	**Summer**		
Module: Human Experience		**Module: Design with Nature**				
TU 103 Life and Sustainability	3	DBT 214 Man and Ecosystem	3	Field Trip: Domestic	0	
DBT 213 Psychology in Design	3	DBT 215 Laws and Regulations in Design Practice	3			
DBT 221 Design Business and Industry	3	DBT 232 Information Technology and Management	3			
DBT 231 Design and Materials	3	DBT 233 Environmental Technology	3			
DBT 242 Inclusive Design Innovation	6	DBT 244 Eco-design Innovation	6			
DBT 243 Advanced English for Innovative Business	3					
Subtotals	**21**	**Subtotals**	**18**		**0**	**39**
Year 3 : Term 1	**Credit**	**Year 3 : Term 2**	**Credit**	**Summer**		
Module: Innovative Business and Industry		**Module: Practical Internship**				
TU 100 Civic Education	3	DBT 347 Practical Internship	9			
DBT 323 Marketing Research	3	DBT 348 Innovative Design Project	3			
DBT 334 Assembly for Design	3					
DBT 346 Service Design Innovation	6					
DBT 416 Planet and Society	3					
Subtotals	**18**	**Subtotals**	**12**			**30**
Year 4 : Term 1	**Credit**	**Year 4 : Term 2 (Master)**	**Credit**	**Summer**		
Module: Design for Change		**Module: Resilience**				
DBT 424 Business Laws and Taxation	3	DBT 613 Special Issue 1	3	Field Trip: International	0	
DBT 425 Social Innovation and Social Entrepreneurship	6	DBT 723 Project Risk Management	3			
DBT 435 Production Design	3	DBT 721 Project Organization	3			
Free Elective 1	3	DBT 722 Project Sustainability	3			
Free Elective 2	3					
Subtotals	**18**	**Subtotals**	**12**		**0**	**30**
Year 5 : Term 1 (Master)	**Credit**	**Year 5 : Term 2 (Master)**	**Credit**	**Summer**		
Module: Integrated Solution		**Individual Development**				
DBT 611 Urban Future/	3	**Plan A**				
DBT 612 Design Strategy and Planning	3	DBT 800 Thesis	12			
DBT 614 Research Skills and Method of Enquiry	3	**Plan B**				
DBT 712 Special Issue 2	3	DBT 700 Individual Study	6			
		Elective 1	3			
		Elective 2	3			
Totals	**12**	**Subtotals**	**12**			**24**
Program Total						**159**

Bachelor of Science in Design, Business and Technology Management (English Program) 3.5 Year

Structure and Components

1. General Basic Courses	**30 Credits**
1.1 Humanities	6 Credits
1.2 Social Sciences	9 Credits
1.3 Science and Mathematics	6 Credits
1.4 Language	9 Credits
2. Core Courses	**87 Credits**
2.1 Design Courses	18 Credits
2.2 Business Courses	18 Credits
2.3 Technology Courses	15 Credits
2.4 Skill and Practice	36 Credits
3. Elective Courses	**6 Credits**
Total	**123 Credits**

Detail of the Curriculum

1. General Basic Courses (30 Credits)

Part 1

- Humanities

TU 102 Socials Life Skills (3 Credits)

Important skills for success in leading a happy life in society. Students learn to develop their ability to manage stress, build emotional security, understand themselves and adapt to psychological, emotional and social problems, Student also learn to understand the meaning of aesthetics, experiencing and appreciating the relationship between art and humanity in different fields, namely visual arts, music, performing arts and architecture.

- Social Sciences

TU 100 Civic Education (3 Credits)

Instillation of social conscience and awareness of one's role and duties as a good global citizen. This is done through a variety of methods such as lectures, discussion of various case studies and field study outings. Students are required to organise a campaign to raise awareness or bring about change in an area of their interest.

TU 101 Thailand, ASEAN and the World (3 Credits)

Study of significant phenomena around the world, in the ASEAN region and in Thailand in terms of their political, economic and sociocultural dimensions. This is done through approaches, theories and principles of social science research via discussion and raising examples of situations or people of interest. The purpose of this is to create a perspective of diversity, to understand the complexity of global interrelationships, to build a global mindset and to be able to challenge old paradigms and open up a new, broader worldview.

- ## Science and Mathematics

TU 103 Life and Sustainability **(3 Credits)**

Integrated study of science, mathematics and other scientific disciplines related to nature, the built environment, economy and society, leading towards sustainable development. The course also looks at lifestyle adaptation to enable prevention, mitigation and adaption, as well as suitably building sustainability in global dynamics, both physically and socially.

- ## Language Courses

TU 104 Critical Thinking, Reading and Writing **(3 Credits)**

Development of critical thinking through questioning, analytical, synthetic and evaluation skills. Students learn how to read without necessarily accepting all the information presented in the text, but rather consider the content in depth, taking into account the objectives, perspectives, assumptions, bias and supporting evidence, as well as logic or strategies leading to the author's conclusion. The purpose is to apply these methods to students' own persuasive writing based on information researched from various sources, using effective presentation techniques.

TU 105 Communication Skills in English **(3 Credit)**

Development of English listening, speaking, reading and writing skills, focusing on the ability to hold a conversation in exchanging opinions, as well as reading comprehension of academic texts from various disciplines related to students' field of study.

TU 106 Creativity and Communication **(3 Credits)**

Creative through processes, with critical thinking as an important part, as well as communication of these thoughts that lead to suitable results in social, cultural and environmental contexts, at personal, organizational and social levels.

Part 2

Students must study these courses as the Faculty's regulation as below;

- ## Humanities

AP 163 History of Art **(3 Credits)**

Evolution of art in both western and eastern world is emphasized in the prominent periods when significant changes of style and characteristics of art occurred. Cultural, social and economic factors underlying the style of contemporary art of Europe and various Asian regions will also be explored.

- ## Social Sciences

AP 165 Value Creation Economy **(3 Credits)**

This course covers fundamental concepts of micro- and macro-economics and their applications to design, business, and technology management. The theories of value creation economy are also highlighted in class. Students will learn how to apply economic concepts and theories to real world problems and develop their analytical problem-solving skills through case studies and discussions.

- ## Science and Mathematics

TU 155 Elementary Statistics **(3 Credits)**

To identify the Nature of statistical problems; review of descriptive statistics; probability; random variables and some probability distributions (binomial, poison and normal); elementary sampling and sampling distributions; estimation and hypotheses testing for one and two populations; one-way analysis of variance; simple linear regression and correlation; chi-square test.

2. Core Courses (87 Credits)

- ## Design Courses (18 Credits)

DBT 211 Design in Everyday Life **(3 Credits)**

An insight into basis of human behavior and an understanding of proper design appropriate in everyday human usage and meets value of design.

DBT 212 Aesthetic and Form **(3 Credits)**

Basic understanding of arts and world of aesthetic, in lights of meaning, experience, judgment, and interpretation of proper relationship between aesthetic and art, and aesthetic and form.

DBT 213 Psychology in Design **(3 Credits)**

Explore fundamentals and development of modern psychology that lead to the understanding of the interrelationship between design and human behavior. From the most basic theories, such as perception, cognition and affect, to the more specific ones regarding spatial behavior, such as individual territoriality, personal space, and the need of privacy.

DBT 214 Man and Ecosystem **(3 Credits)**

Explore concepts of nature and ecosystem that lead to the formation of design inspiration. A study of structure, functions, and dynamics of various ecological systems that exist in surrounding through the continuation of time evolutions. An understanding of interactions between man and ecosystem.

DBT 215 Laws and Regulations in Design Practice **(3 Credits)**

Various types of law issues that regulate design practice including human and physical aspects such as such as land sub-division and land development laws, building laws, city planning laws, energy laws, and environmental laws.

DBT 416 Planet and Society **(3 Credits)**

Basic interactions among people in local and regional settings affected by global development trends in order to create the best collaboration among business and organization.

- ## Business Courses (18 Credits)

DBT 221 Design Business and Industry **(3 Credits)**

The fundamental concepts of business operation and the key knowledge required for operation of innovative business and industry. The contents concern finance, accounting, marketing, and management, business strategies and technical knowledge that leads to design innovation.

DBT 222 Accounting and Financial Information for Decision Making **(3 Credits)**

Understanding of theory and application for accounting and finance in innovative business and industry to achieve appropriate decision making that meets physical, economical, cultural, sociological conditions.

DBT 323 Marketing Research **(3 Credits)**
Fundamental theories in marketing and marketing research including the role and importance of marketing research in innovative business and industry selection of appropriate research that is beneficial to business development; statistic tools for marketing research.

DBT 424 Business Laws and Taxation **(3 Credits)**
Important philosophies and concepts of the business laws and taxation; legal processes and problems affecting design business and industry.

DBT 425 Social Innovation and Social Entrepreneurship **(6 Credits)**
Project-based course and case studies on perspectives and endeavors of thought leaders and entrepreneurs who address social needs in Thailand and internationally as a means of social innovation. The course covers vision setting and integrated skill in project development; mission; goal, business plan, operation plan, financial management and alternative plan.

- Technology Courses (15 Credits)

DBT 231 Design and Materials **(3 Credits)**
Relevant basic Physics theories and experiments are explored to be applied to the design process. Introduction to basic materials sciences regarding their backgrounds, physical characteristics and inherit natures. This includes innovations and proper applications of materials.

DBT 232 Information Technology and Management **(3 Credits)**
An importance of information and information management; structure of data, design and development of information management; innovative technology in information management.

DBT 233 Environmental Technology **(3 Credits)**
Basic principles of environmental technology contributed to design applications that are compatible with global contexts and challenges such as global warming, energy crisis, and sustainable development, etc. Microclimate modification combined with the utilization of elements from passive systems is emphasized to create design solutions that correspond to climatic conditions.

DBT 334 Assembly for Design **(3 Credits)**
Understanding in assembling process under technological and managerial conditions using case studies that show the obvious impact to social value and environmental sustainability.

DBT 435 Production Design **(3 Credits)**
A basic understanding of design and management applications applied to location and facility layout of production. Topics include logistics of motion of people and materials, flow analysis, plant location and layout, and material handling techniques.

- Skill and Practice (36 Credits)

DBT 241 Storytelling and Visual Communication **(3 Credits)**
Understanding of perception, observation, interpretation and presentation of human experience and the development of verbal and visual communication skills.

DBT 242 Inclusive Design Innovation **(6 Credits)**
Explore design thinking process that brings about creative solutions. Project-based learning emphasizing the understanding of user diversity. The diversity ranges from capabilities, needs, and aspirations. Students identify opportunity for innovative solutions by interacting with real users.

DBT 243 Advanced English for Innovative Business (3 Credits)
An advanced course aimed at developing students' English skills. Students are required to have more practice in reading more complex passages of 750 – 1000 words related to design management and in writing various types of essays using technical terms in innovative business and industry.

DBT 244 Eco-design Innovation (6 Credits)
Design innovation project concerning concepts of economic and environmental-friendly methods; life cycle assessment; eco-product innovation and management; marketing for innovative environment and sustainable innovative strategy for businesses, communities, and environment.

DBT 245 Field Trip: Domestic (0 Credit)
Domestic field trip in conducting an analysis study of design concepts and their impacts to quality of life. Some preliminary reading prior to the field trip will be included.

DBT 346 Service Design Innovation (6 Credits)
Design innovation project concerning new services to address the real-world needs. The design solution in this class can be varied; new protocols, policies, communication strategies, hardware products, software programs.

DBT 347 Practical Internship (9 Credits)
Practical internship in certified organization for at least 16 weeks in related field under supervision of co-operative education committee and representation of organization.

DBT 348 Innovative Design Project (3 Credits)
Applying creative thinking to develop a new design solution which creates added-value that meets the requirements to cope with change in term of product or process that aims to increase competitiveness and productivity for innovative business and industry.

3. Elective Courses (6 Credits)

Students can choose the electives courses from Faculty of Architecture and Planning or another faculties of Thammasat University at least 6 credits. <u>This below subjects cannot count into elective courses</u>.

1) Every Basic Science and Mathematics courses (including subjects which are not specify in General Basic Courses Part 2)
2) Every subjects in General Basic Courses in Part 1 and Part 2 which use the title starting with "TU"

Master of Science in Design, Business and Technology Management (English Program) 1.5 Year

Structure and Components

Plan A

1. Compulsory Courses	**12 Credits**
2. Compulsory Elective Courses	**12 Credits**
3. Thesis	**12 Credits**
Total	**36 Credits**

Plan B

1. Compulsory Courses	**12 Credits**
2. Compulsory Elective Courses	**12 Credits**
3. Independent Study	**6 Credits**
4. Electives	**6 Credits**
Total	**36 Credits**

Detail of the Curriculum

1. Compulsory Course (15 Credits)

DBT 611 Urban Future (3 Credits)
Understanding of urbanization process and its dynamics. Topics include identification of future risks and the coping capacities of urban community. This is to characterize vulnerabilities of the city, vulnerability and risk assessment, and to visualize adaptive capacity strategies that lead to sustainability and resilience of cities.

DBT 612 Design Strategy and Planning (3 Credits)
A study of design strategy, planning and decision-making process for effective management in innovative business and industry using case studies of both successful and failed business ventures.

DBT 613 Special Issue 1 (3 Credits)
Special topics in advanced design theory and concept based on students interests to enhance analytical and problem solving capabilities.

DBT 614 Research Skills and Method of Enquiry (3 Credits)
A study of research methodology in design, business and technology management. A series of frameworks of qualitative research is introduced. Students will be able to learn to achieve flexible, design-centered research planning and synthesize data based on intensive reading, exercise and small research projects.

DBT 615 Field Trip: International (0 Credit)
International field work in conducting an analysis study of design concepts and their impacts to quality of life. Some preliminary reading and short workshop prior to the field trip will be included.

DBT 716 Special Issue 2 (3 Credits)
Special topics in theory and concept related to design, business and technology management based on the interests of students which lead to specific research topic development.

2. Compulsory Elective Courses (9 Credits)

Students can study compulsory elective courses (9 credits) in Thammasat University or choose to study at Northumbria University, England.

DBT 721 Project Organization (3 Credits)
A study of fundamentals of project organization management in various innovative business and industry leading to efficient management of human resource, materials, financial sources and information to cope with volatile of business condition.

DBT 722 Project Sustainability (3 Credits)
Fundamental principles of sustainability including ecological, economic and social imperatives. The role and importance of integrated and sustainable project management based of case studies.

DBT 723 Project Risk Management (3 Credits)
Study of decision-making principles and the management of project risks using analytical hierarchy process and other decision-making techniques to achieve the development objectives.

DBT 724 Business Ethic and Moral (3 Credits)
Roles and responsibilities of business organization on the well being of society and environment as one of the transparent social and community components.

DBT 725 Leadership in Design Management (3 Credits)
Leadership development for design business and organizational management to increase competitiveness based on specialization of team members.

3. Elective Course (6 Credits)
Students in Plan B can choose the following courses or the electives courses from Faculty of Architecture and Planning or another faculties of Thammasat University at least 6 credits.

DBT 731 Knowledge Management for Sustainability (3 Credits)
Knowledge management process from knowledge audit, classification, accessibility, and knowledge creation to achieve sustainable management.

DBT 732 Communication and Negotiation in Design Business (3 Credits)
Principles and practices in communication and negotiation in team and public context focus on the development of personal characteristics.

<u>This below subjects cannot count into elective courses</u>.

1) Every Basic Science and Mathematics courses (including subjects which are not specify in General Basic Courses Part 2)
2) Every subjects in General Basic Courses in Part 1 and Part 2 which use the title starting with "TU"

<u>For Students in Plan A</u>

4. Thesis (12 Credits)

DBT 800 Thesis (12 Credits)
Conduct independence research in design, business and technology management that leads to new findings. A research paper is expected for publication and presentation. The conduct of the research and its publication/ presentation must be based on morality.

For Students in Plan B

3. General Elective Courses (6 Credits)

Students in Plan B must study at least 6 credits by choosing courses in Master level which are open in Thammasat University. These courses must be approved by the committee of this program

DBT 700 Independent Study (6 Credits)

Students conduct independence study which is subject to the approval of the curriculum committee. The process of presenting the research should follow appropriate research protocols dealing with topics relevant to design, business and technology management.