

Curriculum Policy of the Graduate School of Science, Technology and Innovation

The Graduate School of Science, Technology and Innovation aims to equip science-focused individuals with research and development capabilities in cutting-edge science and technology across multiple fields, as well as the entrepreneurial skills necessary to commercialize the results of their research.

In order to achieve these goals, the Graduate School offers Special Courses (Advanced Courses in Biotechnology and Environmental Technology, Advanced Courses in Advanced Information and Communication Technology and Advanced Courses in Advanced Medical Science) to foster knowledge of a wide range of specialist fields in the natural sciences and an interdisciplinary perspective. We also provide education equipping students with the necessary skills from the basics of commercialization to the process itself, through Special Courses (Entrepreneurship Courses) and the Course in Project-Based Learning for Entrepreneurship. By combining these courses with thesis guidance, we foster rich creativity and practical problem-solving abilities.

This policy will be implemented based on the Degree Policy of this Graduate School through a systematic curriculum following the courses detailed in the following tables.

Graduate School of Science, Technology and Innovation program aims and courses

Aims of the programme		1st year		2nd year	
		1st semester	2nd semester	1st semester	2nd semester
Humanity	A well-rounded education and a strong sense of ethics	<ul style="list-style-type: none"> ⊙ Introduction to Entrepreneurship ⊙ Entrepreneurship and Law ○ Introduction to Advanced Biotechnology ○ Introduction to Sociology of Advanced Information and Technology ○ Introduction to Advanced Medicine 	<ul style="list-style-type: none"> ⊙ Intellectual Property Law Practice ⊙ Industrial Technology Practice 		
	Understanding of and appropriate action regarding the social influence of science and technology	<ul style="list-style-type: none"> ⊙ Introduction to Entrepreneurship ⊙ New Venture Management ⊙ Business Strategy for New Ventures ⊙ Corporate Finance ⊙ Entrepreneurship and Law ○ Introduction to Advanced Biotechnology ○ Introduction to Sociology of Advanced Information and Technology ○ ICT Developments Toward Social Challenges ○ Introduction to Advanced Medicine 	<ul style="list-style-type: none"> ⊙ Innovation Strategy for New Ventures ⊙ Entrepreneurial Finance ⊙ Intellectual Property Law Practice ○ Advanced Energy Technology ○ Bioprocess Engineering ○ Advanced Course in Regenerative Medicine 	<ul style="list-style-type: none"> ⊙ Presentation Exercises 	
Creativity	Multifaceted perspective and interdisciplinary viewpoint	<ul style="list-style-type: none"> ⊙ Introduction to Entrepreneurship ⊙ Business Strategy for New Ventures ○ Introduction to Advanced Biotechnology ○ Introduction to Sociology of Advanced Information and Technology ○ Introduction to Advanced Medicine 	<ul style="list-style-type: none"> ⊙ Innovation Strategy for New Ventures ⊙ Industrial Technology Practice 		
	Identifying and solving issues in order to create new social values	<ul style="list-style-type: none"> ⊙ Introduction to Entrepreneurship ⊙ New Venture Management ⊙ Business Strategy for New Ventures ○ Advanced Environmental Technology ○ Advanced Course in Food Technology ○ ICT Developments for Social Challenges ○ Clinical Development Management ○ Advanced Course on Development of Molecular Targeted Drugs and Antibody Drugs 	<ul style="list-style-type: none"> ⊙ Innovation Strategy for New Ventures ○ Advanced Course in Agricultural Biotechnology ○ Bioprocess Engineering ○ Advanced Course on Networks ○ Advanced Course in Regenerative Medicine ○ Advanced Course in Development of Biologics ⊙ Project-Based Learning of Entrepreneurship in Science and Technology 	<ul style="list-style-type: none"> ⊙ Project-Based Learning for Entrepreneurship in Science and Technology 	
Internationality	Research from a global perspective	<ul style="list-style-type: none"> ⊙ New Venture Management ⊙ Business Strategy for New Ventures ○ Advanced Environmental Technology ○ Clinical Development Management ○ Advanced Course on Development of Molecular Targeted Drugs and Antibody Drugs ⊙ Advanced Project Research 	<ul style="list-style-type: none"> ○ Advanced Energy Technology ○ Bioprocess Engineering ○ Advanced Course on Networks ○ Advanced Course in Regenerative Medicine ○ Advanced Course in Development of Biologics ⊙ Project-Based Learning for Entrepreneurship in Science and Technology ⊙ Advanced Project Research 	<ul style="list-style-type: none"> ⊙ Project-Based Learning for Entrepreneurship in Science and Technology ⊙ Advanced Project Research 	<ul style="list-style-type: none"> ⊙ Advanced Project Research
	Ability to communicate research results clearly and logically	<ul style="list-style-type: none"> ○ Clinical Development Management ○ Advanced Course on Development of Molecular Targeted Drugs and Antibody Drugs ⊙ Advanced Project Research 	<ul style="list-style-type: none"> ⊙ Innovation Strategy for New Ventures ○ Advanced Course in Regenerative Medicine ○ Advanced Course in Development of Biologics ⊙ Advanced Project Research 	<ul style="list-style-type: none"> ⊙ Presentation Exercises ⊙ Advanced Project Research 	<ul style="list-style-type: none"> ⊙ Advanced Project Research
Expertise	Excellent specialist ability based on wide-ranging knowledge	<ul style="list-style-type: none"> ○ Advanced Environmental Technology ○ Advanced Course in Food Technology ○ Industrial Biotechnology ○ Advanced Lecture on Sensors and Actuators ○ ICT Developments for Social Challenges ○ Clinical Development Management ○ Advanced Course on Development of Molecular Targeted Drugs and Antibody Drugs ⊙ Advanced Project Research 	<ul style="list-style-type: none"> ○ Advanced Course in Agricultural Biotechnology ○ Advanced Energy Technology ○ Bioprocess Engineering ○ Advanced Course on Networks ○ Advanced Course in Computational Sciences ○ Advanced Course in Regenerative Medicine ○ Advanced Course in Development of Biologics ⊙ Industrial Technology Practice ⊙ Advanced Project Research 	<ul style="list-style-type: none"> ⊙ Advanced Project Research 	<ul style="list-style-type: none"> ⊙ Advanced Project Research
	Interdisciplinary mindset based on acquiring fundamental knowledge of other fields	<ul style="list-style-type: none"> ⊙ Introduction to Entrepreneurship ⊙ New Venture Management ⊙ Business Strategy for New Ventures ⊙ Corporate Finance ⊙ Entrepreneurship and Law ○ Introduction to Advanced Biotechnology ○ Introduction to Sociology of Advanced Information and Technology ○ Introduction to Advanced Medicine 	<ul style="list-style-type: none"> ⊙ Innovation Strategy for New Ventures ⊙ Entrepreneurial Finance ⊙ Intellectual Property Law Practice ⊙ Project-Based Learning for Entrepreneurship in Science and Technology ⊙ Industrial Technology Practice 	<ul style="list-style-type: none"> ⊙ Project-Based Learning for Entrepreneurship in Science and Technology 	
	Entrepreneurship	<ul style="list-style-type: none"> ⊙ Introduction to Entrepreneurship ⊙ New Venture Management ⊙ Business Strategy for New Ventures ⊙ Corporate Finance ⊙ Entrepreneurship and Law 	<ul style="list-style-type: none"> ⊙ Innovation Strategy for New Ventures ⊙ Entrepreneurial Finance ⊙ Intellectual Property Law Practice ⊙ Project-Based Learning for Entrepreneurship in Science and Technology 	<ul style="list-style-type: none"> ⊙ Project-Based Learning for Entrepreneurship in Science and Technology 	

⊙ indicates compulsory subjects,
○ indicates optional subjects