

Course Descriptions

CC010 Special Lectures on Leadership: Entrepreneurship

1:0:0

- The spread of a culture based on innovation and a spirit of challenge
- The inculcation of entrepreneurial leadership in students in the integrated master's/Ph.D. program
- The study of entrepreneurial virtues and foundational knowledge of startups
- For increased understanding of and interest in entrepreneurship on the part of students
- Class conducted in format of special lectures given by renowned invited figures equipped with diverse experiences and professional knowledge as entrepreneurs

CC533 Entrepreneurial Leadership

3:0:3

In this course, students will learn about the leadership necessary at the entrepreneurial stage. They will come to understand leadership related to the construction of theoretical entrepreneurial projects and processes and organizational culture and study techniques for leading changes at each stage of entrepreneurship in order to promote corporate growth. Students will learn, through cases of success and failure, about the establishment of vision and mission, formation of teamwork and human relationships, techniques for promoting innovation and creativity, and the key to leadership.

Advanced Multidisciplinary Capstone Design

2:6:4(4)

The purpose of this course is to enable students to implement the process from the derivation of ideas to design, analysis, and production of test products for the resolution of engineering education problems derived from the industrial field, thus instilling in students creativity, a spirit of challenge, expertise, and communication skills through the resolution of actual convergent engineering problems and the basic skills of entrepreneurship. This will allow them to evaluate the value of solution technology derived from a market perspective. Students from diverse majors will work in teams and, through lectures, learn the theory and practice necessary to complete team tasks such as the creation and evaluation of ideas and product manufacturing and presentation methods and the basic concepts of entrepreneurship such as technological value, technology commercialization, and sustainable entrepreneurship.

Needfinding Practice

3:0:3

The purpose of this course is to expose students to a human centered approach to innovation called design thinking, and subsequently lay the foundation of the different aspects associated to needfinding, which includes observation, empathy, ideation and conceptualization. Additionally, students will also learn to collaborate as they will work in teams and also gain real world experience through on/off campus activities.

Special Issues for Undergrads : Entrepreneurship & Innovation

3:0:3

In this course, students are proposed to deal with special issues on entrepreneurship and innovation in order to catch-up actively to quick-revolving market opportunity. For that purpose, the course will lead students to be armed with extensive and convergent expertise/insight on the dynamic change of the STEEP(socio, technology, economy, environment, policy/regulation, industry, market, and technology etc). The issues will be covered by, for example, social entrepreneurship, the 4th industrial revolution, technology foresights on big-data, artificial intelligence, robot, pilotless transport system etc.

Understanding Startups

1:0:1

The purpose of this course is to teach students basic knowledge of entrepreneurship over a brief period so as to raise their understanding of and interest in entrepreneurship. Students will learn about the major stages of entrepreneurship such as team construction, business models, investment hosting, and marketing.

Special Lectures on Startups

1:0:1

Consisting of lectures by invited startup experts including entrepreneurs, early investors, accelerators, and lawyers, this course is offered in order to aid students' basic understanding of entrepreneurship through lectures on vivid field experiences ranging from the preparatory stage to investment hosting and corporate growth.

Startup Simulation Games

1:0:1

The purpose of this course is to teach students the startup processes by using the simulation games. They will learn key issues like tech-based startup, market survey, value proposition, platform business and leadership.

Key Entrepreneurial Process

2:3:3

Through this course, students will obtain deep practical understanding of fields indispensable to the initiation and growth of startups, such as business models, fund procurement process, calculation of corporate value, organizational and personnel management, growth management, corporate ruling structure, and exit strategies.

Social Venture

3:0:3

Students will learn the concept, trends and growth patterns of social ventures, which is growing fast. In addition, this course will let students understand the new venture ecosystem comprised of impact investing and accelerators.

They will get knowledge on social ventures that are working at the intersection of technology innovation such as Health tech, Ed tech, Fintech and social impact. Students will get insight from some of domestic and global social venture capitalists and impact angel investors on their investment decisions

Startup Finance

3:0:3

In this course, students will study the practical finance and accounting necessary for startups. By learning to create financial reports, they will be able to indicate corporations' state quantitatively and to use accounting information in business management. Students will also learn the methods for procuring funds necessary for corporate growth and obtain financial knowledge used in business decision making. They will learn about investors such as angel investors and venture capital as well.

Startup Marketing **3:0:3**

In this course, students will learn about the process of realizing startup ideas and introducing them to the market. They will establish target markets, survey customers, and establish business models and price systems. In addition, students will study methods for enticing customers and the sales process.

Entrepreneur's Toolbox **3:0:3**

This course modularizes into sets the practical tools necessary for entrepreneurs from the preparatory stage to the early management stage. Together with experts, students will learn practical knowledge of laws, patents, negotiations, and communications for entrepreneurs through actual cases and practice each module so as to be able to use it directly in the field.

Design Thinking for Startups **2:3:3**

This course will present the methodology for developing innovative products/services that are demanded by the market and technologically possible based on empathy with customers. As such, it will provide an arena of action learning enabling students to learn and practice the tools for innovative activities (open innovation, design thinking, entrepreneurship). By introducing new information technology (IT) trends and work methods, this course will broaden student's perspectives and provide them with an opportunity to consider entrepreneurship as a career. In addition, students from diverse majors will conduct projects in teams and receive mentoring from corporations that invest in student entrepreneurship, thus prompting the course to lead directly to actual entrepreneurship.

Innovation strategy practice for Startups **3:0:3**

We seek to understand the nature of 'Innovation' and study innovation strategies to design innovative products and service offerings. This course is based on Edu 4.0 education system, the final project output of which is the design of innovative product and service offering.

Special Issues: Entrepreneurship & Innovation **3:0:3**

Addressing broad and diverse topics in entrepreneurship and innovation that have become important for both society and industries/technology in recent years, this course will present lectures on actual issues and cases (ex: social entrepreneurship, 4th Industrial Revolution, AI, robots, uncrewed vehicles, market forecasts in diverse technological fields, big data, etc.) in order to broaden the creative and convergent perspectives of students in the Master of Entrepreneurship and Innovation Program and to enable students actively to prepare for and respond to the swiftly changing and developing business environment.

Advanced Startup Modeling A - Idea-driven Business **3:0:3**

In this course, students learn how to start a startup from scratch focusing on idea business model that can create customer demand through market innovation. The class runs by Edu. 4.0.. and is open for students who have fulfilled the Undergrad minor program in Entrepreneurship & Innovation or an equivalent program in other schools. Students should obtain pre-approval from the faculty.

Advanced Startup Modeling B – Tech-driven Startup **3:0:3**

In this course, students learn a tech-driven startup process from scratch applying relevant strategy framework on each stage. The class runs by Edu. 4.0.. and is open for students who have fulfilled the Undergrad minor program in Entrepreneurship & Innovation or an equivalent program in other schools. Students should obtain pre-approval from the faculty.

Individual Study **0:0:0**

In this course, students will conduct individual study under the guidance of the faculty member in charge. When there is a particular research topic, the faculty member will conduct the course under a subtitle. Students will be required to present both the progress and final outcomes of their research.

Startup Management Practice **1:0:1**

A part of research credits, this course is offered in connection with the course "Startup Onsite Practicum" (KEI998). The purpose of this course is to enable students to grasp and analyze the field management issues faced by the relevant startups and to present solutions. Students will be required to grasp problems during the practice (under the guidance of the faculty member in charge) and then to produce outcomes in the following semester, presenting them to and sharing them with invited experts and startup managers.

Startup Onsite Practicum **0:6:2**

A part of research credits, this course is offered during summer and winter holidays and is connected to the courses "Advanced Multidisciplinary Capstone Design" (KEI501) and "Startup Management Practice" (KEI966). The purpose of this course is to enable students to experience and understand the practical gap between the contents learned and their field application by directly applying what they have learned in "Advanced Multidisciplinary Capstone Design" to the actual workplaces of the relevant startups. Basically conducted with a focus on practice requiring an input of two or more weeks and approximately 80 or more hours, students will be required to learn practical knowledge of startups overall, including research and development (R & D) conducted by startups and the development and commercialization of new products.