COURSE DESCRIPTIONS 科目簡介

COURSES FOR TAUGHT POSTGRADUATE PROGRAMMES

SEI501   Design Methods for Creative Problem-solving and Social Innovation (6 credits)

In any profession, innovative problem-solving skill is central to developing novel products, formulating competitive strategies, driving changes, and making sustainable impact on communities to address pressing social problems.

This 6-credit design studio is designed to equip social innovation leaders to lead creative problem-solving processes in complex, ill-defined, and ambiguous situations. Students will spend ample studio time individually and in teams to tackle business, societal, and sustainable problems. The Service-Learning component in the course affords students opportunities to utilise their creativity for the betterment of humanity by designing possible solutions for real-world challenges. Through this studio training students will learn and adopt social innovation thought processes that are applicable to diverse organisations and situations. Students will work both individually and in groups on various design projects to get on-hands experience with creative problem solving and create a portfolio of social innovative prototypes.

Lectures will focus on real-world design projects to give students a comprehensive overview of design principles and their practical application to address social problems. Students will work on their individual and group projects both during class studio time, as well as outside of contact hours to research user needs and experiences, consider existing product, services and processes and how these can be improved, and design and test prototypes.

All students in the programme are required to complete this course in the first semester.

SEI502   Sustainable Transformation in Organisation Management (3 credits)

This course uses the introduction of theoretical frameworks and case studies during lectures and inquiry-based learning during workshops as its leading teaching pedagogy, focusing on developing students' intellectual dispositions and necessary researchand problem-solving skills. Students will be trained as producers of their knowledge in Sustainable Development in the context of organisational management to help organisations to achieve sustainable development goals for a better future. In addition to theoretical studies, this course involves extensive non-lecture activities, such as case studies, field visits, talks, and workshops to provide hands-on experience and real-life application opportunities to the students. Students will participate in researching, analysing, and identifying gaps to achieve Sustainable Development Goals (SDG)-related topics in certain times and places and try to propose solutions.

SEI503   Entrepreneurial Leadership for Social Startups (3 credits)

The course explores the complex leadership in the social entrepreneurship landscape by taking a pragmatic look into three questions. Why are great entrepreneurial leaders financially and socially effective? What differentiates good managers from great leaders? How can one become an effective leader and how to nurture future leaders in the area of social innovation? To help students develop compelling answers the course will be delivered in three modules, namely

Emotional intelligence and leadership for social changes, Practical tools for entrepreneurial leadership, and Navigating Ambiguity in social innovation with Case studies.

SEI504　Innovation Management (3 credits)

This course teaches students to review innovative methods and processes, as well as modern technology, and apply them to address challenges related to education and beyond. These innovative methods and processes include organisational structure, meeting procedures, idea generation practices, etc., with students gaining knowledge, skills and attitudes related to these innovative methods and processes so that they can utilise them in the context of education. Technologies that will be introduced to students include AI, ICT, and robotics, not in terms of technical details about their inner workings, but in relation to how existing and mature technologies can be implemented in the context of education. The course also teaches students to promote these technologies, innovation methods and processes in the context of education, so that they can be at the forefront of innovation in their future career.

Students will learn how to apply what they learn in the context of concrete, real-world challenges by designing and writing a grant proposal in groups for a project related to innovation management and/or modern technologies, as well as critically review specific innovation management strategies and/or modern technologies in relation to an individual research assignment. Lectures on innovation management will include an introduction to various innovation theories, innovation project management, and methodologies and tools for innovation. Modern technology lectures will focus on topics such as machine learning, blended and remote learning, gamification, and intellectual property. Classes will feature on-hands exercises and workshops, so that students learn things that they can quickly implement into their (future) career.

SEI505　Design Innovation for Addressing Social Challenges (6 credits)

(Prerequisite(s): (a) SEI501 Design Methods for Creative Problem-Solving and Social Innovation; or (b) SEI508 Design Innovation for Arts and)

This course focuses on cultivating students' creative confidence by teaching them the participatory design processes that are necessary for undertaking a successful design innovation project to address specific community needs in collaboration with community members. Based on a broad theme selected by the course coordinator (such as active ageing, inclusive entrepreneurship, humanitarian technology, etc.) students will first learn how to identify current issues and needs within that theme in collaboration with a target group (e.g. elderly, ethnic minorities, physical and/or mental disabled). After gaining an insight into this target groups' needs and values, groups of students will phrase a specific design challenge that they will work on for the rest of the course. Students will learn how to design a product, process, or policy for social innovation through a series of trainings in participatory design, creative exercises, shorter design challenges, makerspace practical, etc. After designing a conceptual prototype of their product, process, or policy, students will test it in the field by interviewing and meeting with target users (e.g. elderly wheelchair users for a novel wheelchair prototype). After this initial test, students will fine-tune their design according to users' feedback. Finally, students will learn how to effectively scale-up their design by learning about effective ways to communicate and actualise their novel ideas through storytelling, entrepreneurship, and pitching training. At the end of the course, students will present their final design to the course coordinators and their peers and learn to critically discuss the designs and their possible implications/limitations, as

well as the possibilities for scaling-up through social innovation and project funding applications.

SEI506   Humanitarian Technology (3 credits)
This technology course is designed to empower non-tech professionals to experience the power of mature technologies and produce breakthrough ideas by overcoming technology mental blocks. Social innovators and humanitarian workers will find the engineering processes useful for unlocking the innovative capacity of their team and overcoming fears. Technology and engineering professionals will be inspired by participatory creative processes and innovative applications of technologies for humanitarian purposes in least expected situations.

This unique multidisciplinary course blends knowledge in electronics, mechanics, computer programming and system design to provide students with both the theory and practical skills needed to design functional products and inclusive systems. Students will apply design theory and participatory approaches to develop technology that meets the social, cultural, and economic context of the local community. Through series of intensive hands-on workshops students will experiment a variety of technology and design methods to flex their creative muscles.

Upon completion of this course, students will develop knowledge and skills related to hardware and software aspects of humanitarian technology, and the capacity to navigate the innovation space between technology and humanitarianism. Students are also expected to be able to apply rigorous engineering design methods while taking more human-centred, participatory, and inclusive approaches when developing new solutions.

This course requires no prior training in engineering and technology. Anyone interested to alleviate human suffering and improve the conditions of humanity through innovative use of technology are welcomed.

SEI507   Inclusive Entrepreneurship: Scaling-up in Developing Markets (3 credits)
From solar lights to human-powered water filters; educational mobile apps to low-cost medical diagnostics, there has been a kaleidoscope of new products, technologies and services designed to serve nearly 4 billion people living at the base of the pyramid (BoP). Many of these held great promise for significant social impact but far fewer fulfilled their potential to solve poverty issues at a larger scale.

This inclusive entrepreneurship course shall critically examine the commercial viability of these new products and services in emerging markets to ensure that BoP communities benefit both as consumers and producers of these new offerings. It will also look into strategies to drive innovation and solutions relevant to the BoP communities while building markets, strengthening supply chains, and enhancing long-term competitiveness.

Apart from the fundamentals of inclusive entrepreneurship, this course will address its relevance in solving development challenges; and how to systematically bring technologies and products to the BoP. Through local and global case studies, participants will be exposed to frameworks and tools to market, distribute and scale solutions for the BoP. Learning will be applied and experiential with instructors being practitioners of Inclusive Entrepreneurship

themselves. Participants can expect to be involved in intensive classroom debates to cultivate inclusive business practices and mindsets in their organisations and day-to-day work.

SEI508   Design Innovation for Arts and Culture (6 credits)
In any profession, innovative problem-solving skill is central to developing novel products, formulating competitive strategies, driving changes, and making sustainable impact.

The course foregrounds the critical function of design for addressing complex social problems by leveraging on the engaging power of arts and culture. Students will practice to design arts and cultural activities that creates opportunities to connect stakeholders, spark conversation, re-examine assumptions, arouse curiosity, inspire new ideas and promote action for inclusive growth.

In this course, students will learn to apply design methods and tools to generate creative ideas for rediscovering and revitalizing community-based wisdom, knowledge and skills. Students will learn about product and service design methods through hands-on experimentation and project-based learning. Students will learn design methods and principles through various design thinking projects, specifically in relation to arts and culture. Students will consider how innovation in this sector could revitalise cultural heritage.

SEI509   Interactive Arts and Technology (3 credits)
This course introduces students to the various ways in which technology can be utilized in the arts, design, and cultural sectors. No previous technological background is required: students will learn simple application of existing and mature technology to think about how these can be implemented to revitalize cultural heritage, enhance interest and visibility of arts and culture, bring about new forms of interaction in relation to the creative sector, and more. The course will be a combination of lectures on various technologies and how they pertain to arts and culture, as well as workshops where students have a chance to familiarize themselves with some of the technical and design aspect of these technologies.

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