



# Institute for Engineering Leadership

Nurturing Leaders through Innovation & Entrepreneurship

We advocate the nurturing of engineer-leaders through innovation and entrepreneurship learning experiences. We aim to nurture engineers who are able to deal with uncertainty & change, and leverage on engineering & tech know-how to create & capture value.

## GIVE

opportunities for students to test themselves in new ways, reflect and learn to be leaders

## DEVELOP

strategic and systems thinking skills as students evolve business plans and test opportunities

## PROVIDE

exposure to basic business management knowledge and practice of delivery skills that can help translate innovation to application in the form of a new venture

## ENCOURAGE

the development of an innovative & entrepreneurial mind-set in students

## STRENGTHEN

their discovery skills through application in the entrepreneurial process

# OUR MODULES



Institute for Engineering Leadership  
Faculty of Engineering

## TechLaunch

TechLaunch is a unique experiential module in which students develop skills in identifying and capturing value from technological innovation. Students take technology developed at NUS or by third parties and go through the process of creating a technology business. Students will work in cross-disciplinary teams of graduate students, and will spend much of their time talking to customers & partners in search of the right market and the right business model that can leverage the uniqueness of a technology. Through this, they enhance their innovation and leadership skills.

## Frugal Innovation

Frugal innovation has become a very timely and topical subject, especially since economic growth in the developed world is stagnating. Emerging markets are often the source of frugal innovations; from necessity as people in these markets are forced to “do more with less” in order to overcome significant local constraints. This module will enable students to understand the concept of frugal innovation through experiential projects. Over a semester, students will be required to identify a clear problem in one of the regional economies and work on developing and presenting a solution.

## Enterprise Development

This module focusses on how to develop new or grow existing enterprises using technology. The course is a primer on identifying & validating market opportunities, and how to create value with technology. In each session, new tools and methodologies will be presented. Teams will then apply the new tools in their search for opportunities in their specific market and technology. Teams will be challenged to confirm their conclusions through validation with externals before presenting their findings to other teams to provide constructive feedback. The rigorous process allows students to develop practical skills in communication and teamwork, as well as provide a foundation for the building up of value-creation and capturing skills.

## InnoVenture

InnoVenture provides opportunities for students to come together, form teams and challenge themselves to create innovative solutions that solve real world problems. The programme is a way for students to experience what it takes to ideate, lead teams, and learn how to set up a viable business. Students will get their hands (not just their brains!) active by developing real working solutions that create impact.

## Experiencing Engineering Leadership

Leadership is a learnable skill developed through experiencing, reflecting and internalizing. This module introduces Engineering undergraduates to leadership principles which will guide students as they find their own path towards becoming leaders in engineering. They will be provided opportunities to apply this knowledge through project work, reflection on experience sharing from engineer-leaders and in setting out their individual leadership development plan.

