JOINTLY OFFERED BY
DEPARTMENT OF COMPUTER SCIENCE (CS)
DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING (ECE)

BACHELOR OF ENGINEERING
Computer Engineering

Designing Intelligence
The Computer Engineering programme (CEG) at NUS prepares its graduates to embark on a lifelong journey in designing computing systems for a smarter world – hence our theme “Designing Intelligence”.

Technology is being interwoven into our lives by a variety of devices used by people of all ages and as part of their daily routine. Computer engineers introduce greater intelligence in increasingly smaller but more powerful devices – from the smart phone that you cannot live without, to massive industrial control systems that power economies. They create the electronic systems in a modern car containing dozens of computing systems communicating through a network. They connect the physical world with cyberspace to enhance everything from entertainment to healthcare and the environment.

CEG gives you the skills and knowledge to engineer exciting solutions that move as well as change the world.
Here is what NUS Computer Engineering aims to make you:

- a **TECHNICAL EXPERT** who can solve complex real-world problems in computer engineering
- a **CRITICAL THINKER** who can analyse difficult issues and make hard decisions
- an **EFFECTIVE LEADER** who can communicate, lead, and nurture diverse teams
- a resourceful **LIFELONG LEARNER**

Does this fit your vision of who **YOU** want to be?
Past graduate employment surveys have consistently shown that computer engineers have some of the highest employment rates and best starting pays among all graduates. Here are some of the exciting companies that our computer engineering graduates are employed in:

- Accenture
- Barclays Capital
- Citibank
- Cooliris (Startup)
- DSO National Laboratories
- Facebook, U.S.A.
- Freshmentors (Startup based in Silicon Valley)
- Google, U.S.A.
- Google
- LucasFilm
- Microsoft Asia
- Microsoft, U.S.A.
- Republic of Singapore Air Force
- Republic of Singapore Navy
- ST Electronics
- VSee (Startup based in Silicon Valley)
- Started their own companies

CEG students can choose to specialise in numerous areas including:
- Embedded Computing
- Intelligent Systems
- Interactive Digital Media
- Large Scale Computing
- System-on-a-Chip Design

In addition, there are opportunities in:
- NUS Overseas Colleges
- Student Exchange Programmes
- Double Degree Programmes
- Minor Programmes
- Enhancement Programmes

The NUS Computer Engineering programme gives our graduates the flexibility of building a career in the IT industry or in other allied sectors. Employers value the skills our graduates possess even if they are not in the IT business.
Why CEG @ NUS?

“... the most valuable thing for me is the hands-on learning offered in CEG’s project-based modules. It has enriched me greatly. To quote Richard P. Feynman, a physicist, “What I cannot create, I do not understand.” I had to create my own algorithms and solutions to different problems imposed on us, widened my knowledge and deepened my understanding in this particular academic field, theoretically, and, strengthened my application skills, practically. On top of these, the programme enhanced my interpersonal skills and soft skills such as teamwork and public speaking.”

Paul Stephen Rempola Avella

“The modules introduced practical applications of the theoretical concepts and created a lot of interest amongst the students as we could see the concepts in action. We started with building a strong programming logic and were then introduced to the hardware portions. It was fun to see software controlling hardware. CG227I took us in more details of the software and how it can be made to function well with multi-tasking systems and hardware. Embedded systems and hardware has always been my interest and I believe that this course is fulfilling my interests.”

Angad Singh

“Software is the IN thing now, but hardware is the future. I joined CEG to get the best of both worlds, and learn from the best. I didn’t know I had a passion for electronics until I joined CEG. I just knew that I wanted to be in the best programme.”

Lito Chen Yang

“Being in CEG means getting the best out of ECE and CS. Being able to gain knowledge from both the hardware and software aspect of Information Technology puts you in a very advantageous position. The focus on teamwork and leadership in CEG, through many team projects, is also an important key factor and quality that firms look out for, in new hires. Throughout my four years in CEG, I was involved in many programmes such as overseas summer programme at Korea University, summer internships at various firms, and also a local student exchange programme at SMU. Yes, CEG is a challenging course but it definitely makes my university life fulfilling and enriching. Are you ready to join CEG and take up the challenge?”

Kevin Lin

“Entrepreneurship is a passion very close to my heart and gladly NUS provides me a chance to pursue it. The thrill of taking calculated risks, the excitement in anticipating the results of a new strategy and the joy of meticulous planning bearing fruition excites me. I realize that most great start-ups are grounded in great technology. As a Computer Engineering (CEG) student, I am trained to think analytically across multiple disciplines and inflate ideas to reality. The NUS Overseas Colleges programme allowed me to experience entrepreneurship at the place where it breeds best – Silicon Valley. I worked at one of the hottest startups (#4 on the Forbes List now) in the field of Artificial Intelligence and founded my own company which went on to the finals of Stanford 150k Startup Challenge. The NOC experience has been one of my most cherished memories from my time at NUS.”

Apoor Agrawal