**Ansal University**

**School of Engineering and Technology**

**COMPUTER SCIENCE AND ENGINEERING**

Computer Science and Engineering (CSE) is the discipline that is behind the new Information Age we presently are in, whereby Human Intelligence, Effort and Analytical Abilities are supplemented, augmented or substituted with the Computational and Processing capabilities of Computers, Algorithms and Intelligent Systems. Dept of CSE in S.E.T. at Ansal University has state of the art labs, machines with high configuration and latest software required for teaching and research.

**Specializations within CSE:**

* Soft Computing
* Image Processing
* Software Engineering
* Network Engineering
* Information Security
* ERP Solutions

**Scope for CSE:**

Computer Engineers and Computer Science Professionals are involved in many industrial segments like banking, public transport, public utilities, manufacturing, healthcare, service industry and government sectors as many of the processes and operations are technology-oriented and being computerized. Computing professionals are crucial personnel in academics, research, industry, government, private and business organizations and consultancies in the ongoing developments of automation and computerization.

**Job Prospects for CSE:**

There are many MNC and Computer Software Giants that offer jobs with excellent remunerations with continuous opportunities for international exposure and experience.

For a graduate specialized in Computer Science, there are vast job opportunities as

* Software Engineer
* Hardware Engineer
* Programming Engineer
* Web Developer
* System Analyst
* Webmaster
* Network Engineer
* Database Administrator
* System Administrator
* Network Administrator

Some of the World’s top Indian and International IT companies offering placements for the B.Tech. Computer Science graduates include:

Indian Companies

* TCS
* Infosys Technologies
* Cognizant Technology Solutions
* Wipro
* HCL Technologies
* Tech Mahindra
* Patni Computer Systems
* Mphasis
* NIIT Technologies

International Companies

* Hewlett-Packard
* Cisco Systems
* Dell
* Microsoft
* IBM
* Oracle
* Intel
* Accenture

CSIR Labs

* CSIR Fourth Paradigm Institute
* CSIR Unit for Research and Development of Information Products

DRDO Labs

* Advanced Numerical Research and Analysis Group (ANURAG)
* Center for Artificial Intelligence and Robotics (CAIR)
* Institute of Systems Studies and Analysis (ISSA)

DAE Labs

* Tata Institute of Fundamental Research (TIFR)
* Institute of Mathematical Sciences

Others

* C-DAC
* D.I.T., GOI

**A Few Visionaries, Entrepreneurs, Scientists and Teachers of CSE:**

**Larry Page** and **Sergey Brin** created Google, which became the buzz word for readily available information in modern day life. Google now provides many futuristic products and services.

**Bill Gates** is the man who started Microsoft in his garage. He created the single most influential technology company of our times and developed Windows System that is prevalent in most of the computers and smart phones today.

**Vinod Khosla** is a Co- founder of Sun Microsystems, which created Java and Network File System. He is also one of the most well known Venture Capitalists in California.

**Vinod Dham** is an inventor, entrepreneur and capitalist and is popularly known as the “Father of the Pentium Chip.”

**Azim Premji** is the Chairman of Wipro Ltd, guiding the company through four decades of diversification and growth to emerge as one of the leaders in the software industry. He also initiated World-renowned CSR Ventures such as Mission10X to train *for gratis* over 25,000 Engineering Teachers in India in the latest pedagogies & e-learning methodologies.

**Shiv Nadar** ventured product services and solutions across the entire IT stack and customer satisfaction as its main focus at HCL. With over 40 years of leading the path for software industry in India, the company is also focusing on CSR initiatives such as building Universities and Networks of Schools providing high quality education to the Students.

**Satya Nadella** joined Microsoft to change the world through technology and became the third CEO of Microsoft after Bill Gates and Steve Ballmer. He believes that industry doesn’t respect tradition but respects only innovations which constitute a continuing process.

**Prof. Raja Raman** wrote several books on Computer Science and Programming. Apart from his immense contribution in popularizing the field of computer science he has received many honours and awards. His research work resulted in easy to implement low-cost parallel computers and optimal scheduling of tasks in parallel computers to get better performance.

**Recent Developments in CSE:**

* Transistor revolutionized the field of electronics and led to microelectronics
* Integrated Circuit resulted in the development of Mainframes and Minicomputers
* VLSI helped the advent of PCs
* Computer Networks were developed in academic and military institutions and later became widely available as the Internet
* E-mail and [WWW](http://en.wikipedia.org/wiki/World_Wide_Web) became essential to the modern day life
* Laptops, Palmtops, Smart phones, Tablet PCs are integrated into managing academic curricula and industrial operations
* Cloud Computing is attracting much attention as Institutions and Companies are using it to manage their computing needs and storage solutions with an impact on the very viability of enterprises

*Summary/CSE/SET/Ansal U./Ver. 1.1/Jun 20, 2014*