Career Options for Engineering Graduates

http://www.hindu.com/2011/06/07/stories/2011060762780300.htm

It has been known without doubt that Engineering has remained as one of the most sought after career option for bright students over years. Mushrooming of several hundered engineering colleges in the recent years, along with presence of Ivy League colleges across the length and width of the country is a testimony to engineering being considered as the hottest career option among conventional and non conventional careers available.

There is no dearth of opportunities for aspirants after graduation in engineering. The career options (for engineers) can range from esteemed Indian Engineering Services (IES) or, jobs in Public Sector Units (PSU) offering diversified, challenging and stable career options, to research and development, teaching and Prestigious private sector lucrative jobs after Masters in respective discipline in engineering after qualifying Graduate aptitude test in engineering (GATE). Post engineering degree there are other options for engineers like Civil Services, State Engineering Services, MBA, Banking Sector, Defence Services, higher study abroad through GRE and GMAT.

In the light of above, the MADE EASY has been standing tall as an undisputed best coaching/training centre for Engineering Services Examination, GATE and PSU's. MADE EASY was established way back in 2001 under the able guidance of its Managing Director Mr. B. Singh (Ex. IES), who himself has distinction of qualifying Engineering Services Examination thrice and has wide experience in providing guidance to engineering graduates. Mr. Singh is an alumnus of prestigious IT -BHU and a renowned educationist. Mr. Singh's visionary leadership has transformed MADE EASY from a humble education start-up in to a renowned education power house, known for churning toppers consistently year after year. Within a decade of existence, MADE EASY has become a synonym for "toppers factory" (as its students call it). In fact all this has become achievable through sheer consistent, committed, focused, systematic, well coordinated and untiring efforts of specialized and expert faculty members under guidance of Mr. Singh.

The dedication and commitment of Mr. Singh and his entire team is so contagious that the students find themselves more than motivated to achieve their goal. In its decadelong presence, MADE EASY has constantly been chosen as success partner by several thousand students each year.

The ensuring of success at MADE EASY is resting on the pillars of ethics, attitude and aptitude and no less, with an eye to perfection. The institute has a pan India presence with centres at Delhi, Noida, Hyderabad and Bhopal and offers career guidance through Classroom and Postal Coaching Programmes in all the branches of core engineering viz.., Civil Engineering, Mechanical Engineering, Electrical Engineering, Electronics Engineering, Computer Science/IT and Instrumentation Engineering. Apart from that,

MADE EASY conducts Classroom Test Series, Postal Test Series, Online Test Series and Interview Guidance courses

Besides that MADE EASY has a publishing unit called MADE EASY Publications which publishes several competitive books for IES, GATE and PSUs which are available at leading book stalls across India. Our readers will find it convenient to understand the things in a better perspective, if they go through the following.

Career Prospects in IES, Every Second Selection in IES 2010 is from MADE EASY

Through Indian Engineering Services (IES) a candidate gets a career in most reputed government departments like Indian Railways, Military Engineering Services, Central Engineering Services, Telecommunication Department, Central Water Services etc. In these services an Engineer gets an opportunity to handle technically challenging roles and tasks which have a direct bearing on the building up of infrastructure and services of our nation. The job is doubly- rewarding not only in terms of fulfillment and happiness achieved by serving one's own people through technological innovations but also in terms of a high social status attached to Engineering Services.

For entering Engineering Services, a candidate has to appear in an Engineering Services Examination conducted by the UPSC every year in the month of May/June. The Engineering Services Examination is a combined competitive examination ,conducted in four categories (i) Civil Engineering (ii) Electrical Engineering (iii) Electronics and Telecommunication (iv) Mechanical Engineering .For success in Engineering Services Exam a candidate is required to have excellent fundamentals in the core subjects ,along with thorough update on general awareness, current affairs and no less ,all the traits of matured personality. In Engineering Services 2010 examinations MADE EASY students secured more than half of the seats (every second selection in IES 2010 is from MADE EASY) including toppers. Details are available at www.madeeasy.in . Career Options in Public Sector Units (PSUs)

PSU are a government-owned corporations, state-owned companies, state enterprises, publicly-owned corporations or government business enterprises. PSUs are legal entities created by a government to undertake commercial activities on behalf of an owner government. Public Sector Enterprises (like NTPC, ONGC, IOCL, BPCL, HPCL, BARC, DRDO etc), a aspirant is required to have good technical knowledge, apt general aptitude and reasoning and a pleasing personality. PSUs jobs can be considered as a perfect blend of highly professional work environment (as of private jobs) and stable career (as in government jobs). An employee gets the best of the both world as he is able to manage work- life balance and as well take on challenging technical and managerial assignments head on. The added advantage is banquet of health, medical and other facilities and services that an employee and family enjoys all throughout. Best part of these services is high job satisfaction and career growth due to proper use of technical knowledge and management capabilities. PSUs recruit through individual entrance Examinations having technical and non technical questions. Generally there is individual cut off of either section. To sum, the salient attractive features of these jobs are modernization in

technology, Corporate Work Culture, Salary Structure, Facilities and job satisfaction and above all stable and secure future and career growth. Most of these PSUs require 60 to 65 % aggregate marks (which may vary from one to other PSU) in qualifying engineering degree. Most of PSU will conduct their own entrances barring couple of them which intake through GATE.

Selection process will involve a written test followed by Interview, Group Discussion and Case Studies. Though another classification can be done based on their financial standings like gross turnover, operating profits and variety of other parameters. The classification of PSUs can be as Maharatnas, Navratnas and Miniratnas.

Career Opportunities through GATE

GATE is an all India Examination for admission in post graduate courses (ME, MS and MTech) in various engineering colleges conducted by the GATE committee comprising Faculty Members From IISc (Indian Institute Of Sciences) and various IITs (Indian Institute of Technology) on behalf of the National Coordinating Board, Department of Education, MHRD. GATE is normally conducted on 2nd Sunday of February each year. MADE EASY is renowned for consistently producing toppers in GATE.

POST GATE CAREER OPPORTUNITIES

- 1. Campus placements in best of national and international private/public engineering and technology companies.
- 2.PSU placements based on GATE score: Various PSUs like IOCL, BARC etc shortlist and recruit candidates on the basis of GATE score
- 3. Teaching assignments like Professors, Assistant Professors at IIT's, NIT's and various engineering colleges.
- 4. Senior and Junior Research Fellow at ISRO, DRDO, BARC, IIT's etc.
- 5.Research Associates and Senior Project Associate at various institutes and organizations.
- 6. Scientists at various national and international organizations
- 7. Research and Development Wing of various multinational corporations.

COLLEGE PREFERENCES

On the basis of qualitative analysis based on faculty, infrastructure, contribution in research, international standings, and campus placements technological Institutions may be classified into following categories:

CATEGORY-A

IISC Bangalore, IIT Mumbai, IIT Delhi, IIT Kanpur, IIT Kharagpur, IIT Chennai, IIT Roorkee, NITIE Mumbai

IISc Bangalore being the best in its class in research. Various IITs can also offer cross domain placements in Information technology, Investment banking and consultancy. NITIE Mumbai offers post graduate degree in Industrial Engineering (PGDIE) through GATE and post graduate degree in Industrial management (PGDIM) through CAT. Both course are par excellence and will require valid scores followed by GDs and interviews. Few of these institutions will also conduct interview apart from high valid GATE scores.

CATEGORY-B

IIT Guwhati, IIT Hyderabad, IT BHU, NIT Warangal, NIT Trichy, NIT Calicut, NIT Rourkela, NIT Allahabad

CATEGORY-C

NIT Bhopal, NIT Kurukshetra, NIT Jalandhar, NIT Nagpur, NIT Jaipur, IIIT Allahabad and Gwalior, BITS Pilani, NSIT Delhi

CATEGORY-D

Dhirubhai Institute of Technology Gandhinagar (Gujrat), Manipal Institute of Technology, Jadhavpur University, Punjab Engineering College, JNTU Hyderabad, ISM Dhanbad, Anna University Chennai, BIT Meshra Ranchi, VJIT Mumbai, Thapar University Patiala, Jamia Milia Islamia Delhi, NIT Hamirpur, I.P University Delhi, NIT Surat, NIT Silchar, MBM Jodhpur, Osmania University Hyderabad, MITS Gwalior, BIT Patna, BIT Sindari, G.B Pant Engineering College U.P, BIT Jhansi

Based on specialization in various branches a candidate can prioritize as referenced below. But we will also advise aspirants to take care of individual liking, understanding and passion for a subject before blindly following recommended list.

ELECTRONIC ENGINEERING

VLSI Design Tool Technology (* Open for other stream also), Integrated Electronics and Circuits, Micro Electronics, Microwave Engineering, Communication Engineering, Telecommunication Technology and Management, Optoelectronics and Optical Communication, Computer Technology, Digital Signal Processing, Control and Automation, Nanotechnology

ELECTRICAL ENGINEERING

VLSI Design (Core branch of EC), Integrated Electronics and Circuits (Core branch of EC), Power Electronics, Machine and Drives, Power Systems, Telecommunication Technology and Management (Core branch of EC), Control and Automation, Digital Signal Processing, Instrumentation Technology (Core branch of IN), Communication Engg. (Core branch of EC), Computer Technology (Core branch of CS)

MECHANICAL ENGINEERING

Design of Mech. Equipment or Machine Design, Thermal Engineering, Manufacturing Science and Engineering, Production Engineering, Industrial Engineering, Material Science and management

CIVIL ENGINEERING

Structural Engineering, Geotechnical Engineering, Construction Engineering and Management, Transportation Engineering, Environmental Engineering, Earthquake Engineering, Water Resources Engineering, Rock Engineering and Underground Structure

COMPUTER SCIENCE and IT ENGINEERING PRIORITY SPECIALIZATION

Computer Science and Engineering, VLSI Design (Core branch of EC), Integrated Elect. and Circuits (Core branch of EC), Computer Architecture, Operating System, Computer Security and Algorithm, Information System, Network and Mobile Communication, Software Technology, Information Technology and Computer Applications.