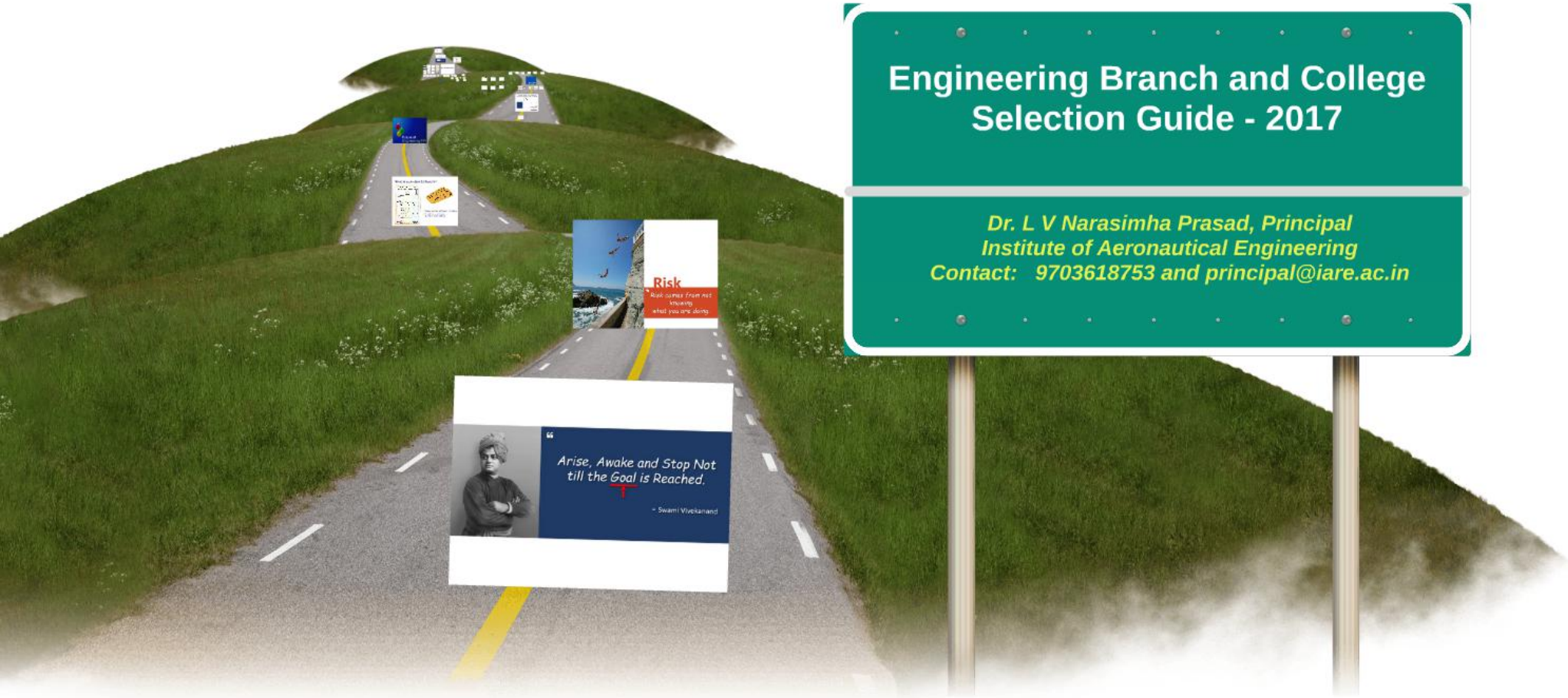
Engineering Branch and College Selection Guide - 2017

Dr. L V Narasimha Prasad, Principal
Institute of Aeronautical Engineering
Contact: 9703618753 and principal@iare.ac.in



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"

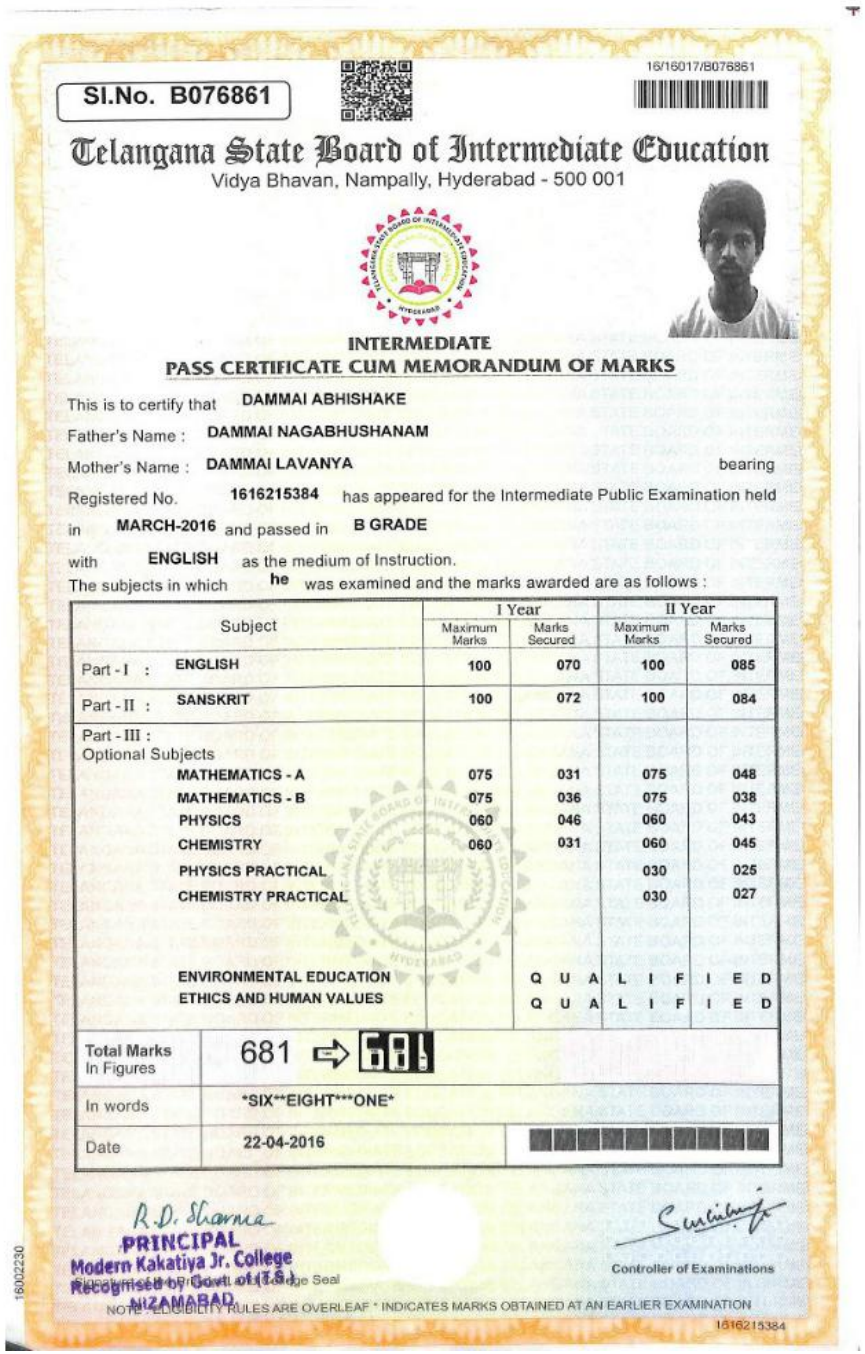
Arise, Awake and Stop Not till the Goal is Reached.

- Swami Vivekanand

Risk

"Risk comes from not knowing what you are doing.

What is your class 12 Results?



Sl.No. B076861

16/16017/B076861

Telangana State Board of Intermediate Education

Vidya Bhavan, Nampally, Hyderabad - 500 001

INTERMEDIATE

PASS CERTIFICATE CUM MEMORANDUM OF MARKS

This is to certify that DAMMAI ABHISHAKE

Father's Name : DAMMAI NAGABHUSHANAM

Mother's Name : DAMMAI LAVANYA bearing

Registered No. 1616215384 has appeared for the Intermediate Public Examination held

in MARCH-2016 and passed in B GRADE

with ENGLISH as the medium of Instruction.

The subjects in which he was examined and the marks awarded are as follows :

Subject	I Year Maximum Marks	I Year Marks Secured	II Year Maximum Marks	II Year Marks Secured
Part - I : ENGLISH	100	070	100	085
Part - II : SANSKRIT	100	072	100	084
Part - III : Optional Subjects				
MATHEMATICS - A	075	031	075	048
MATHEMATICS - B	075	036	075	038
PHYSICS	060	046	060	043
CHEMISTRY	060	031	060	045
PHYSICS PRACTICAL			030	025
CHEMISTRY PRACTICAL			030	027
ENVIRONMENTAL EDUCATION		Q U A	L I F	I E D
ETHICS AND HUMAN VALUES		Q U A	L I F	I E D

Total Marks In Figures	681 ⇨ 681
In words	*SIX**EIGHT***ONE*
Date	22-04-2016

R.D. Sharma

PRINCIPAL

Modern Kakatiya Jr. College

Recognised by Govt. of T.S.

NIZAMABAD

Principal's Signature & College Seal

Controller of Examinations

NOTE : ELIGIBILITY RULES ARE OVERLEAF * INDICATES MARKS OBTAINED AT AN EARLIER EXAMINATION

1616215384

16002230

- ✓ Opens door for admission in College
- ✓ To write entrance exams like TS EAMCET, JEE etc

Future of Engineering???

New national programs designed to transform India for next generation of growth & development

MAKE IN INDIA

Digital India
Power To Empower

STARTUP INDIA
STAND UP INDIA

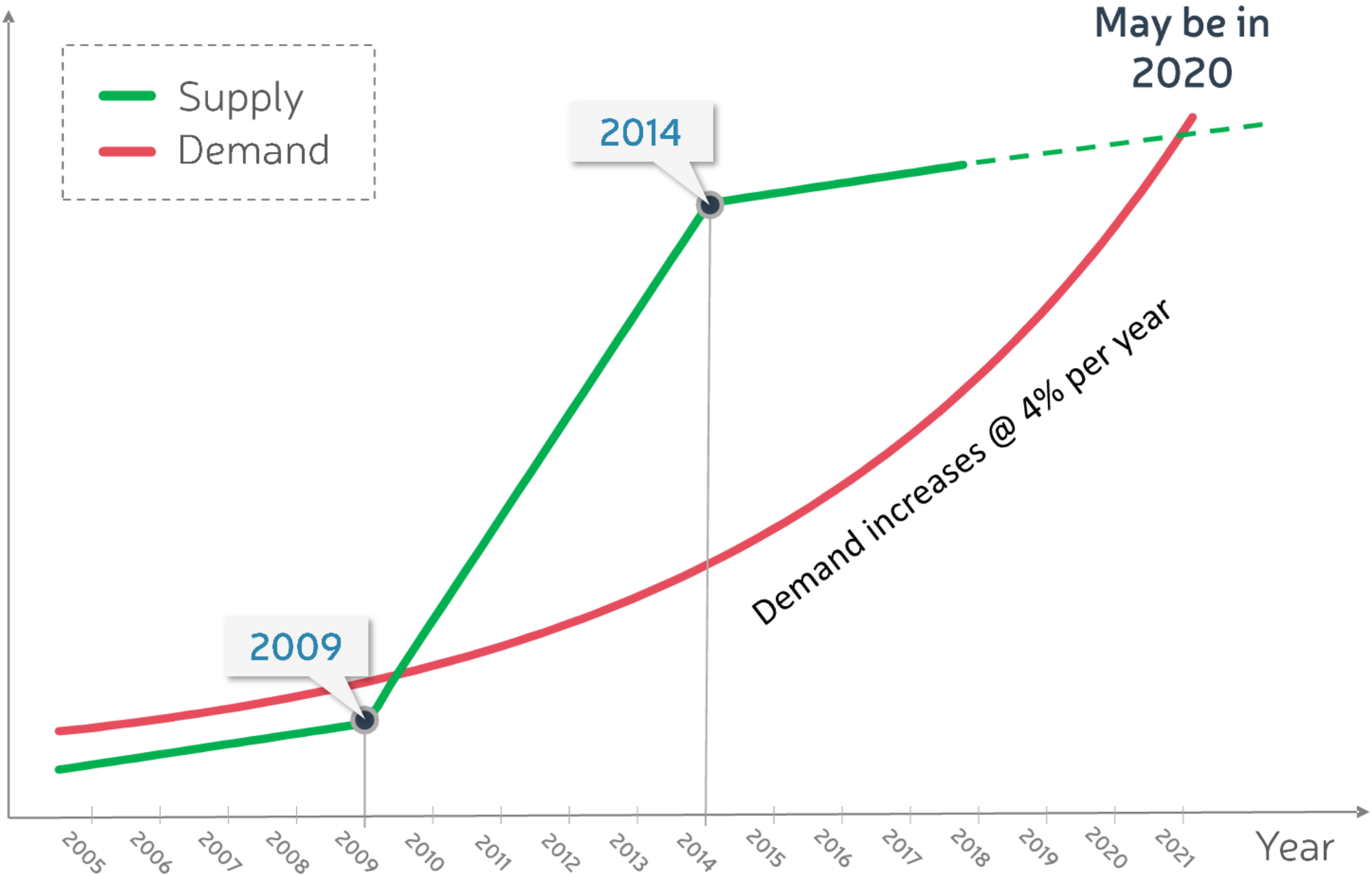
Skill India
कौशल भारत - कुशल भारत

प्रधानमंत्री जन-धन योजना
मेरा खाता भाग्य विधाता

स्वच्छ भारत
एक कदम स्वच्छता की ओर

DEMAND ↑ of Engineer

Engineers – Demand vs. Supply



How to Select Branch???

Where find lies Your Interest?

- ✓ Excites the curiosity
- ✓ Based on your skills & Strengths

Look Behind the Scene

What is Branch?

- ***Area, Domain or Type of work*** *where you will* ***work for entire life.***

= Goal, Destination, Career

Branch

= ***Path*** to achieve Goal

College

Types of Branch

Branches

40+

Colleges

130+

Basic (Core) Branches

Specialized Branches

Other Branches

Basic Branches

- Used or applicable in ***most of the industries***
- Wide spectrum of ***jobs***, ***job areas***, ***location*** & ***business scope***

Aeronautical

√ propulsion systems,
√ Flight mechanics
√ guidance and control systems,
√ aerodynamics
√ robotics

Civil

√ Transportation
√ Buildings
√ Water Resources
√ Geotech
√ Environmental

Computer

√ Software
√ Website
√ ERP
√ Mobile Apps
√ IoT

Electrical

√ Electrification
√ Power Supply
√ Electric Machines
√ Power
- Generation
- Transmission
- Distribution

EC

√ Hardware
√ Communication
√ Automation
√ Software

Mechanical

√ Machines
√ Production
√ Physical Conversion

IT

√ installation
√ development
√ implementation of computer systems
√ and applications

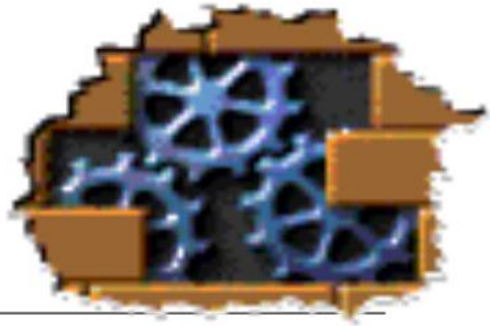
Civil Engineering

- *Civil engineering is the oldest branch in the history of human kind. It is related to civilization*
- *It deals with the planning, design, construction of buildings, highways, bridges, dams, airports, etc.*
- *Civil engineer gets job in the public sector from municipal corporation to central governments, and in the private sector from individual builders to international companies.*
- *Specialization can be done in many areas like Structural, Construction, Water Resources, Architectural, Environmental, Geotech, Transportation, etc.*
- ***Who should select Civil Engineering?***
  - Students who are rough & tough by nature, can work in any season and ready for physical work on site.
  - If a student is looking for government job or planning to start construction business.
  - Good command on mathematics and drawing are expected

Electrical & Electronic Engineering

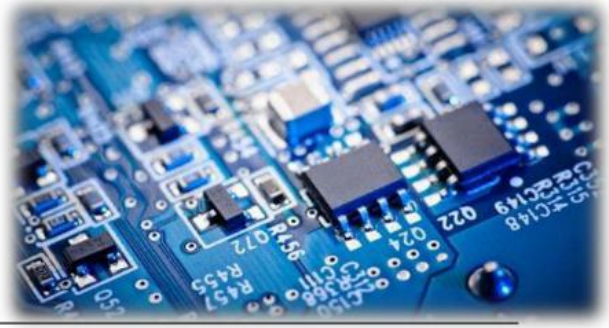
- *Electrical engineering surrounds us everywhere in modern society.*
- *The electrical engineer supplies us with the ability to harness electricity which has transformed our lives. It gives us light, heat, entertainment, communication systems and comfort.*
- *Electrical engineers create and design products and information systems using scientific principles combined with natural curiosity, problem-solving and innovation.*
- *It covers a wide range of careers including Power Generation and Transmission, Control Systems, Communications, Robotics, Electronics and Nanotechnology, just to name a few.*
- *Electrical engineers work on anything from small pocket devices to large aircraft electrical systems.*
- ***Who Should Select Electrical Engineering?***
  - If you are interested in electrical systems, electronics devices and related technologies.
  - If you are inspired and motivated by technology and by the physical sciences or if you have a curious and analytical mind that enjoys the study and application of science, technology and mathematics.
  - If you are willing to embark in the serious study and practice of those subjects.

Mechanical Engineering



- *Mechanical engineering is one of the largest, broadest and oldest engineering discipline, that's why it is also known as Mother of all engineering disciplines.*
- *Mechanical engineers design and manufacture an enormous range of products from washing machines, copying machine to complex items like turbines, racing cars, planes and even faster rockets and yes, they even create robots. In a word, mechanical engineers creates - almost anything.*
- *Almost every industry you can think, depends on mechanical engineering to thrive. That's why there is such a huge global demand for mechanical engineers.*
- ***Who should select Mechanical Engineering?***
  - If you enjoy creating practical solutions to problems and like turning your ideas into reality,
  - The student who is inventive, good interest in basic math and science, can work according to environment i.e. team work, multitasks at a time, love to work with man and machines, etc.
  - Those who have family business or planning to start should give preference to mechanical engineering.

Electronics & Communication Engineering

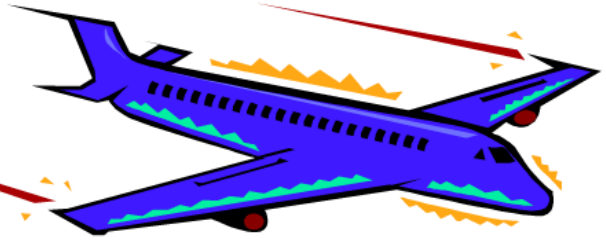


- *ECE broadly deals with systems related to acquiring, communicating, manipulating and analyzing information.*
- *ECE covers wide range of systems from sensor to satellites, calculators to computers, robots to radars,mobile phones to medical electronics, automation to electronics in automobiles, etc.*
- *ECE has played a major role in technology revolution that we see today and has highly influenced all domains of engineering and our day-to-day life.*
- *Study in ECE covers both hardware (system/circuit) and software (programming) skills hence varieties of job profiles are available that covers office job as well as field job.*
- *In addition to core ECE, job opportunities are also available in fields related to IT, ICT, Instrumentation, Bio-medical, etc.*
- ***Who should select Electronics & Communication Engineering?***
  - Students who are interested to work with latest technology and MNC kind of work environment.
  - Students who do not mind migrating to metro cities for higher salary and fast career growth.
  - Students who are interested to go abroad for higher studies or job.

Computer Science Engineering/ Information Technology

- *Computer engineering has started digital revolution that has changed our lives completely.*
- *It is the scientific and practical approach to computation and its applications.*
- *It has spread its roots in all areas of our life, business, economic system, etc.*
- *It is the only branch where an engineer can become crorepati by doing only job.*
- *Computer engineer, also known as a software engineer, is responsible for designing, developing, testing and evaluating the software that makes our computers work.*
- *As on date, more number of computer engineers are working in Hyderabad than any other branch.*
- ***Who should select Computer Engineering?***
  - If student is looking for job immediately after graduation then computer is right choice.
  - If student is planning to start white collar business without investment then computer is right choice.
  - If student is not willing to do field job and prefer office job then computer is right choice.
  - Computer engineering is the right choice for those who born and brought up in cities.
  - Student should have logical, reasoning & puzzle solving skills and able to work 10 hours continuously.

Aeronautical Engineering



- Aeronautical engineering deals with science involved in building aircrafts and spacecrafts.
- It is a specialization of Mechanical Engineering which deals only with flying vehicles
- This branch deals with thermodynamic, fluid dynamics, propulsion, control engineering and material engineering of working with flying vehicles.
- ***Who should select Computer Engineering?***
  - Strong sense of responsibility and Ability to work speedily with accuracy - since aircrafts have to be serviced in a short time
  - Ability to work as members of a team
  - Students who are interested to work in Airlines, Air Force, Corporate Research Companies, Defence Ministry, Helicopter Companies, Aviation Companies, NASA and many others.

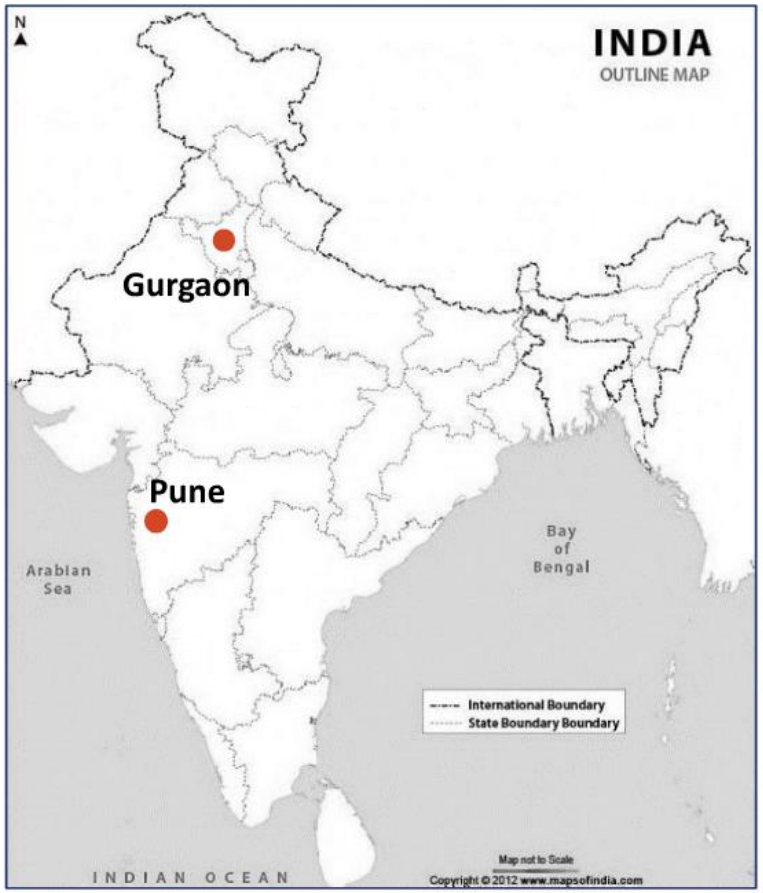
Specialized Branch

- ***Designed*** for specific type of work ***based on demand***
- ***Limited scope*** for ***jobs***, ***job areas***, ***location*** & ***business scope***

Automobile Engineering

Mechanical Engineer

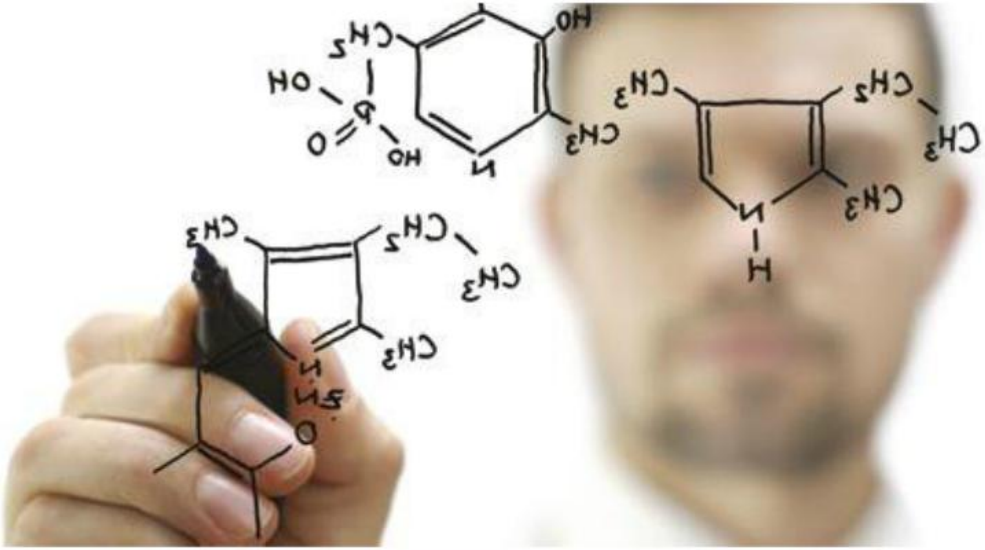
Automobile Engineer



Demand is very limited.

Chemical Engineering

- ***Tough competition*** from B.Sc. (Chemistry)
- Job location in metro cities
- Should be very careful in ***work environment***



Few More Specialized Branches

- ***Instrumentation and Control (IC)***
  - Works for industries with automated processes, such as bio-medical or manufacturing plants
- ***Mechatronics***
  - Difficult branch compared to other branches
  - Combination of Mechanical & Electronics
- ***Production, Industrial***
  - Areas of Mechanical engineering

If you have ***enough information*** about the branch and ready to ***relocate anywhere in the country*** then only prefer specialized branch.

Other Branches

- Fancy or Attractive Names
- Available in one or two colleges only

Branch	Points to Think
Bio-Technology	Better to do Chemical Engineering and then Ph.D.
Environmental	Part of Civil Engineering, better to go for Civil Engg.
Nano Technology	Only Aurora college offering in Telangana state

Bio-Medical, Mining, Metallurgical, Plastic, Rubber, Food Processing, Marine, etc.

Before selecting such branches, Do visit college & meet students.

If you have family business related to this branch then only it is advisable to choose it.

Branch Selection Matrix

Tick your preferences & consider the branch with higher ticks

Branch → / Parameter ↓	Aero	Mech.	CSE/IT	EEE	ECE	Civil
Job Type	Field Job (60%) Office Job (40%)	Field Job (80%) Office Job (20%)	Office Job	Field Job (70%) Office Job (30%)	Field Job (40%) Office Job (60%)	Field Job
Nature of Job	Hard (Physical Work)	Hard (Physical Work)	Soft (No Physical Work)	Medium to Hard	Soft to Medium	Hard (Physical Work)
Government Jobs	Medium Scope	Low Scope	Very Low Scope	Huge Scope	Low Scope	Huge Scope
Private Sector Jobs	Huge	Huge	Highest	Medium	High	Limited
Campus Placement	High	High	Highest	Low to Medium	Huge	Low
Salary Growth	Medium	Medium	Very Fast	Medium	Fast	Medium
Business with Low Capital	Moderate Scope	Moderate Scope	Huge Scope	Moderate Scope	Moderate Scope	Huge Scope
Job Locations	Local to Global	Local to Global	Local to Global	Local to Metro	Metro to Global	Local to Metro

How to Select College???

Branch v/s **College**

If you ***like a college***, then pursue ***any branch available*** in that college

If your ***focus is on branch***, then pursue in ***any college*** where it is available

Most Important Parameters to choose college

College profile

Affordability ₹

College Selection Criteria

Autonomous / Non-Autonomous (Affiliated) Institutes

- ***Drawbacks of the university affiliating system:***
  - As large numbers of colleges are affiliated to the Universities it becomes very difficult to manage the quality standards.
  - Curriculum is common with many other affiliated institutes and is regulated by a University throughout entire state and exams are conducted by the affiliated University.
  - The colleges have a subsidiary character with no function as catalyst in education for social change and progress.
  - Teachers have hardly any role in generating knowledge and absolutely no recognition in research undertakings.
  - Students have limited options with hardly any provision for individual's aptitudes and aspirations.
  - Changes in curriculum and syllabi are very slow in the affiliating system due to difficulty of bringing together large number of people involved in the process.

Autonomous / Non-Autonomous (Affiliated) Institutes

- ***Salient Features In Autonomous Institutes***
  - Academic independence gives freedom to revise the syllabus with time and follow a schedule which is more suitable for the set curriculum.
  - Exams are conducted by the institute itself and are in accordance with what is being taught during the session.
  - Relative grading system where the highest mark obtained by a student decides the marks the others get. So in case of a difficult paper, a low percentage score would not necessarily mean a low GPA.
  - Students can pick subjects of their choice rather than being forced to rote learning what they do not wish to.
  - Degrees finally awarded by the affiliated University which generally carries a lot of reputation.
  - Have higher status compared to their counter-parts, obviously indicates a superiority and prestige.
  - Being equipped with the right kind of infrastructure attracts higher degree of campus placements

2. Faculty

- Faculties are the soul, heart & brain of the college
  - Number of Faculties w.r.t. Intake (Faculty – Student Ratio)
  - Stability of Faculties
  - **Experience** of faculties in **field** and **academics**
  - Industrial Exposure & Consultancy

3. Campus Environment

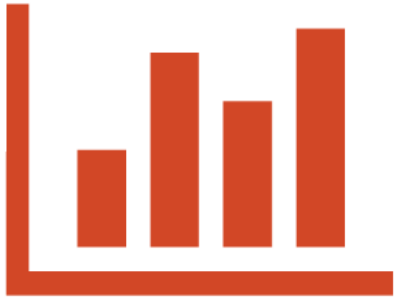
- Disciplined and Academic
- Student Monitoring System
- Daily Reporting to Parents

4. Infrastructure

- Building is not main infrastructure of the college,
  - Equipment in Laboratories
  - Machine Tools in Workshop
  - Books & Resources in Library
  - Class Rooms
  - Student Store & Cafeteria
- *Easy access to resources is real infrastructure !!!*

5. Result

- University Results is direct reflection of
  - Faculty Quality
  - Teaching Standard
  - Academic Environment
- Compare result with reference based on how many joined and completed their degree with in stipulated period



6. College Rankings

सत्यमेव जयते

NIRF Ranking given by Government of India for Engineering Colleges in Telangana State

S.No	College Name	City	India Rank	Entrance test	Govt./ Private
1	Indian Institute of Technology Hyderabad	Hyderabad	10	JEE Advanced	Govt.
2	National Institute of Technology Warangal	Warangal	34	JEE Mains	Govt.
3	International Institute of Information Technology	Hyderabad	75	JEE Mains	Govt.
4	University College of Engineering	Hyderabad	80	TS - EAMCET	Govt.
5	Chaitanya Bharathi Institute of Technology	Hyderabad	90	TS - EAMCET	Private
6	CVR College of Engineering	Ibrahimpatan	108	TS - EAMCET	Private
7	Vasavi College of Engineering	Hyderabad	145	TS - EAMCET	Private
8	VNR Vignana Jyothi Institute of Engg. & Tech.	Hyderabad	148	TS - EAMCET	Private
9	Gokaraju Rangaraju Institute of Engg. & Tech.	Hyderabad	164	TS - EAMCET	Private
10	**Institute of Aeronautical Engineering**	**Hyderabad**	**166**	**TS - EAMCET**	**Private**
11	JNTUH College of Engineering	Hyderabad	168	TS - EAMCET	Govt.
12	Kakatiya Institute of Technology & Science	Warangal	172	TS - EAMCET	Private
13	Mahatma Gandhi Institute of Technology	Hyderabad	180	TS - EAMCET	Private
14	MLR Institute of Technology	Hyderabad	181	TS - EAMCET	Private
15	Padmasri Dr. B.V. Raju Institute of Technology	Medak	186	TS - EAMCET	Private
16	Vardhaman College of Engineering	Hyderabad	194	TS - EAMCET	Private

6. College Rankings

Ranking given by Popular Agencies for Engineering Colleges

CAREERS360 Ratings 2017

S.No	College Name	Place	Rating
1	Chaitanya Bharathi Institute of Technology	Hyderabad	AAAA
2	Kakatiya Institute of Technology & Science	Warangal	AAA+
3	CVR College of Engineering	Ibrahimpatan	AAA+
4	Vasavi College of Engineering	Hyderabad	AAA+
5	VNR Vignana Jyothi Institute of Engineering & Technology	Hyderabad	AAA+
6	Gokaraju Rangaraju Institute of Engineering & Technology	Hyderabad	AAA+
7	Vardhaman College of Engineering	Hyderabad	AAA+
8	**Institute of Aeronautical Engineering**	**Hyderabad**	**AAA**
9	Mahatma Gandhi Institute of Technology	Hyderabad	AAA
10	MLR Institute of Technology	Hyderabad	AAA

THE WEEK Rankings 2016

S.No	College Name	Place	Ranking
1	Chaitanya Bharathi Institute of Technology	Hyderabad	15
2	Muffakham Jah College of Engineering and Technology	Hyderabad	55
3	MLR Institute of Technology	Hyderabad	58
4	B.V. Raju Institute of Technology	Narsapur	62
5	CVR College of Engineering	Hyderabad	66
6	CMR College of Engineering	Hyderabad	78
7	CVSR College of Engineering	Hyderabad	80
8	**Institute of Aeronautical Engineering**	**Hyderabad**	**84**

THE WEEKLY

TIMES OF INDIA Ranking 2016

S.No	College Name	Place	Ranking
1	Chaitanya Bharathi Institute of Technology	Hyderabad	69
2	**Institute of Aeronautical Engineering**	**Hyderabad**	**97**
3	Kakatiya Institute of Technology & Science	Warangal	106
4	Vasavi College of Engineering	Hyderabad	114
5	VNR Vignana Jyothi Institute of Engineering & Technology	Hyderabad	138
6	CMR College of Engineering	Hyderabad	139

Special January 2017 Issue ₹75

competition success review

Ranking 2016

S.No	College Name	Place	Ranking
1	CMR College of Engineering & Technology	Hyderabad	9
2	CMR Engineering College	Hyderabad	10
3	CMR Institute of Technology	Hyderabad	11
4	Gokaraju Rangaraju Institute of Engineering and Technology	Hyderabad	16
5	**Institute of Aeronautical Engineering**	**Hyderabad**	**20**
6	Malla Reddy College of Engineering and Technology	Secunderabad	28
7	Malla Reddy Engineering College for Women	Secunderabad	29
8	Sreenidhi Institute of Science and Technology	Ranga Reddy	42

CAREERCONNECT
The link to your future

Rating 2016

S.No	College Name	Place	Ratings
1	Chaitanya Bharathi Institute of Technology	Hyderabad	4.5
2	B.V. Raju Institute of Technology	Narsapur	4.5
3	CVR College of Engineering	Hyderabad	4.5
4	Sreenidhi Institute of Science and Technology	Hyderabad	4.5
5	**Institute of Aeronautical Engineering**	**Hyderabad**	**4**
6	Vardhaman College of Engineering	Hyderabad	4
7	CMR Institute of Technology	Hyderabad	4
8	Vasavi College of Engineering	Hyderabad	4
9	VNR Vignana Jyothi Institute of Engineering & Technology	Hyderabad	4
10	Gokaraju Rangaraju Institute of Engineering & Technology	Hyderabad	3.5

7. Placement

Placement is the result of previously listed parameters.

Always remember,
Placement is a side product of Quality Education.

7. Placement Type

Education based

Minimum 60% in
SSC, 10+2, B.Tech.(No Backlog),
Good English & Communication Skill

Starting 30,000+

TATA | Reliance Industries Limited | LARSEN & TOUBRO | Infosys | WIPRO Applying Thought

Skill based

Only Skill matters
1st Class in B.E. is enough

Starting 10,000+

7. Placement

- ***Now a day, Companies arrange common placement***
- They choose any one college as campus drive venue
- Students from good colleges are invited for the drive
- Students of good colleges get equal opportunities
- Most important thing is that ***Placement is branch specific.***
  - Higher Placement: Computer, EC, Mechanical
  - Lower Placement: Civil, Electrical

8. Intake

- Quality of Education degrades in overcrowded campus
- Quality and Quantity never goes together, specially in education
- Intake has direct effect on campus environment, teaching, result & placement

9. College Timing

- College timing should be optimized not stretched
- It should give sufficient time for
  - career development
  - other activity of interest

10. Affordability

CBIT

- Started in 1979
- Branches : CSE, IT, ECE, EEE, Civil, PE, Chem, Bio-Tech and Mech.
- Fee details: **Rs. 1,13,500/-**
- NAAC, NBA, UGC Autonomous and NIRF ranked college

Vasavi

- Started in 1981
- Branches : CSE, IT, ECE, EEE, Civil and Mech.
- Fee details: **Rs. 86,000/-**
- NAAC, NBA, UGC Autonomous and NIRF ranked college

VNR VJIT

- Started in 1995
- Branches : CSE, IT, ECE, EEE, EIE, Automobile Engg., Civil and Mech.
- Fee details: **Rs. 98,500/-**
- NAAC, NBA, UGC Autonomous and NIRF ranked college

Sreenidhi

- Started in 1997
- Branches : CSE, IT, ECE, EEE, EIE, Automobile Engg., Civil and Mech.
- Fee details: **Rs. 98,500/-**
- NAAC, NBA, UGC Autonomous and NIRF ranked college

10. Affordability

MLRIT

- Started in 2005
- Branches : Aero, CSE, IT, ECE, and Mech.
- Fee details: **Rs. 70,000/-**
- NAAC, NBA, UGC Autonomous and NIRF ranked college

Vardhaman

- Started in 1999
- Branches : Aero, CSE, IT, ECE, EEE, Civil and Mech.
- Fee details: **Rs. 1,05,000/-**
- NAAC, NBA, UGC Autonomous and NIRF ranked college

MGIT

- Started in 1997
- Branches : MME, CSE, IT, ECE, EEE, Civil and Mech.
- Fee details: **Rs. 1,00,000/-**
- NAAC, NBA, UGC Autonomous and NIRF ranked college

Gokaraju

- Started in 1997
- Branches : CSE, IT, ECE, EEE, Civil and Mech.
- Fee details: **Rs. 95,000/-**
- NAAC, NBA, UGC Autonomous and NIRF ranked college

10. Affordability

IARE

- Started in 2000
- Branches : Aero, CSE, IT, ECE, EEE, Civil and Mech.
- Fee details: **Rs. 67,000/-**
- NAAC, NBA, UGC Autonomous and NIRF ranked college

*Quality does not reflect on **High Tuition FEES ...***
*It reflects on **Quality of Teaching***

***IARE** have been achieving **International Quality Education** with dedicated faculty, passionate students and moderate tuition fees.*
Experience more at IARE !!!

How to collect information?

Information Type		From
Faculties, Fee, Placement, Transportation, College Timing	→	college website
Results of University Exam	→	University and college website
Infrastructure, Campus environment, Quality of faculties & teaching, etc.	→	Current Students of the College

To Do for College Selection

Sort list 3 to 4 colleges that match your criteria

Personally visit those colleges

Meet professors, students. ***Observe*** environment

Currently studying students are real testimony

☺

Respect what you get

☹

Don’t regret for others

Information is your best friend

Ignorance is your worst enemy

THANK YOU..!

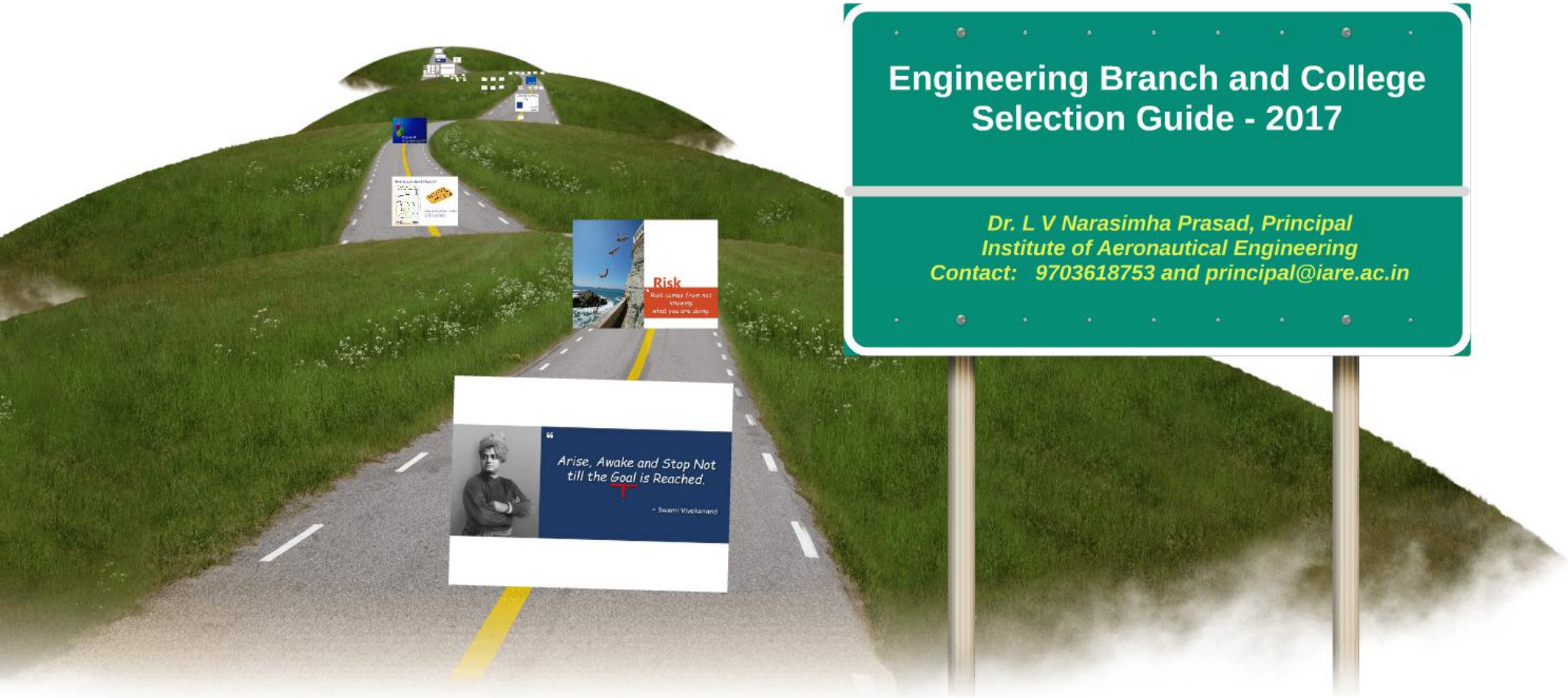
GOOD LUCK

Counselling Center

Dr. G Ramu,
Professor in CSE,
Institute of Aeronautical Engineering
Dundigal, Hyderabad – 500 043
Telangana, India.

08418 - 257181, 257202
09703618753 & 09703962233

9:00 AM to 6:00 PM



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