

Why Study For an Undergraduate Engineering Degree in College

By

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You Should be Asking
Yourself The Question:

WHY SHOULD I READ THESE SLIDES?

TO EDUCATE YOURSELF BETTER
SO YOU CAN MAKE
AN INFORMED DECISION
ON
WHAT TO STUDY
IN COLLEGE

WHY GO TO COLLEGE?

- More CASH €€ after College
- More FUN in College
- Acquire Knowledge for Life's Journey
- That is WHAT one Does after Leaving Cert
- If I Don't, My Parents will GET MAD!

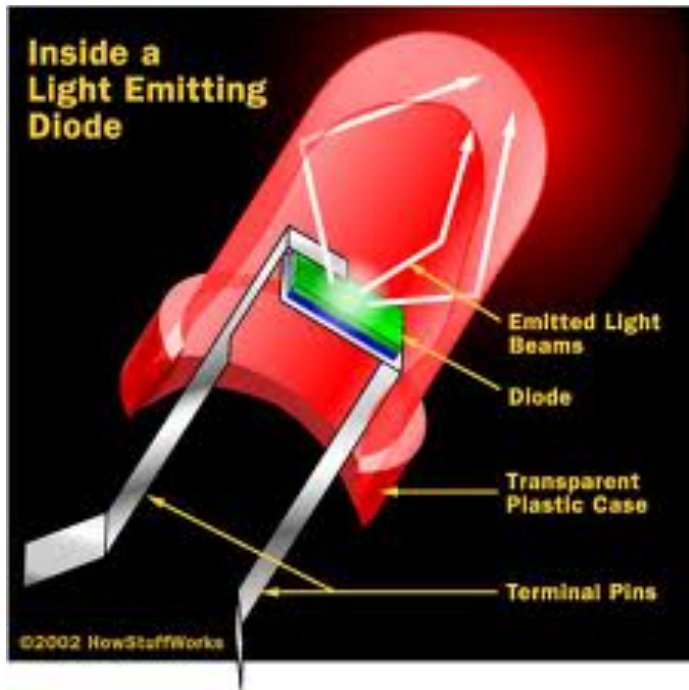
WHAT DO I STUDY?

Engineering!

WHAT DOES AN ENGINEER DO?

Invents a New Device

– The Light Emitting Diode (LED)



Nick Holonyak
An Electronic Engineer



Shuji Nakamura
2014 Nobel Prize, Physics
An Electronic Engineer

WHAT DOES AN ENGINEER DO?

Designs a New Structure

– The Golden Gate Bridge, San Francisco



Long Thin Bridge
with
Suspension
Cables

Charles Ellis **Structural/Civil Engineer**

WHAT DOES AN ENGINEER DO?

Tests New Machine

– The X-15 Rocket Powered Jet



As of 2014, Still
Holds the World
Record 4520 mph
Manned Jet Speed

Neil Armstrong

An Aeronautical Engineer

WHAT DOES AN ENGINEER DO?

Conducts Development of a New Gadget

– The Mobile Phone

1973



2013



A Hand-Held
Wireless
Communications
Gadget Introduced
By Motorola



Martin Cooper (BS, MS, IIT Chicago)

Electronic Engineer

WHAT DOES AN ENGINEER DO?

Manages a Technology Project

– The NASA MARS ROVER MISSION



Designed and Tested
By a **TEAM** of Electrical,
Electronic, Mechanical,
Materials, Aerospace,
& Chemical Engineers

John Callas **An Engineer**

WHAT DOES AN ENGINEER DO?

Sells and Markets a Technology Product

– The FORD MUSTANG CAR



The Car Design was
NOT Totally Unique but
its Global Marketing,
Sales, Manufacturing,
and Distribution
Strategy was
Unique

Lee Iacocca, President, Ford

Industrial Engineer

WHAT DOES AN ENGINEER DO?

Leads a Diverse Large Multi-National Business

– The General Electric Company (GE), USA



Energy

Technology Infrastructure

Capital Finance

Consumer & Industrial

Jack Welch, CEO

A Chemical Engineer

Common ENGINEERING degrees

BE/BS Degree Programs:

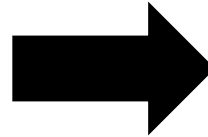
- Aerospace Engineering
- Chemical and Process Engineering
- Civil and Environmental Engineering
- Electrical and Electronic Engineering
- Mechanical Engineering
- Biomedical Engineering

ENGINEERING Focuses on Educating Tomorrows Technological Leaders

Trained Skill Set in:

- **Problem Solving**
- **Analytical Thinking**
- **Teamwork**
- **Leadership**
- **Management**
- **Speaking Skills**

**IMPACT
FOR
The WORLD**



Placed in:

- **Large to Medium Industry**
- **Academia**
- **Small Business**
- **Government**
- **Financial and Legal Services**

HOW DO I PREPARE TO STUDY ENGINEERING

**In High School take courses
in:**

- **Mathematics**
- **Physics**

**And if possible take
Courses in:**

- **Chemistry**
- **Biology**
- **Computer Programming**









WHAT IS THE COMMON THEME
OF THE PHOTOS JUST SEEN?



Rowan Atkinson
**Electrical
Engineer**

Comedy Actor



Jimmy
Carter
US President
Nuclear Engineer

Politician



Leonardo
De Vinci

**Engineer
&
Inventor**

Painter



Frank Capra
Chemical Engineer
Caltech

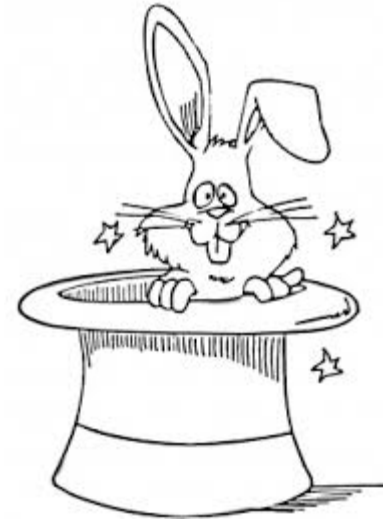
Oscar Winning Movie Director



APPLY FOR ADMISSION TO
Schools of Engineering

"Any sufficiently advanced technology
is indistinguishable from magic."

- Arthur C. Clarke



**SO COME LEARN SOME MAGIC (ENGINEERING) !
AND HAVE FUN DOING IT!**

THANK YOU