



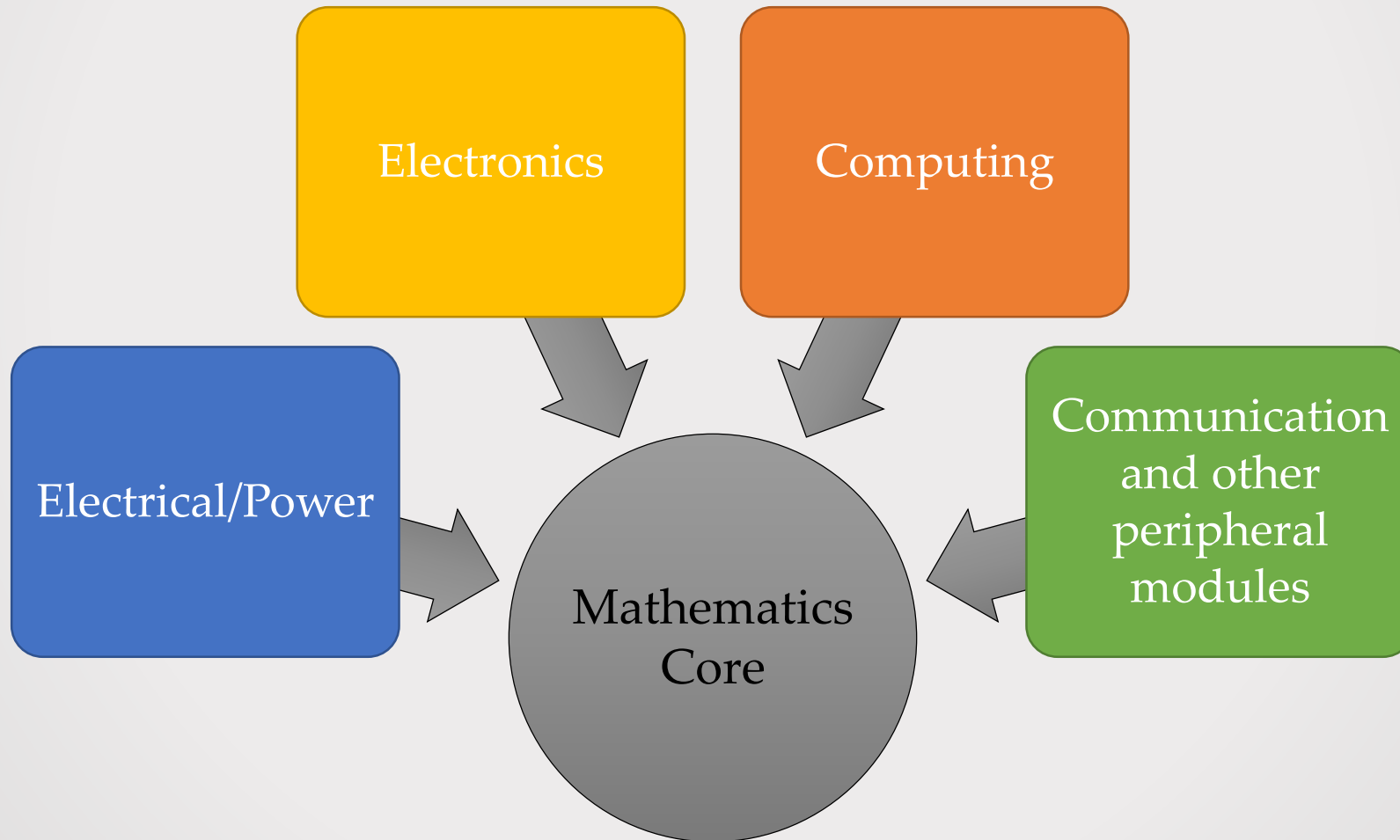
A Career in Electrical and Computer Engineering

**Presented by
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What makes an Engineer?

- Interested in knowing how things operate and work
- Want to solve real world problems
- Interested in Experimentation, Design and Implementation
- Good at Math and Science
- Being creative and eager to learn new things
- Reasonably good communicator

Core areas of expertise



Computing

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graph LR; Computing --- OOP[Object oriented programming]; Computing --- CN[Computer Networks]; Computing --- DCN[Data Communication and Networks]; Computing --- DSA[Data Structures and Algorithms];
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Object oriented programming

Computer Networks

Data Communication and Networks

Data Structures and Algorithms

Electronics

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graph LR; Electronics[Electronics] --- Foundations[Foundations of Digital Design]; Electronics --- Fundamentals[Electronic Fundamentals]; Electronics --- Design[Electronic Design]; Electronics --- Power[Power Electronics];
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Foundations of Digital Design

Electronic Fundamentals

Electronic Design

Power Electronics

Electrical / Power

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graph LR; A[Electrical / Power] --- B[Electrical Circuits]; A --- C[Power Systems]; A --- D[Electrical Machines and Stability]; A --- E[Electrical Power Transmission and Distribution];
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Electrical Circuits

Power Systems

Electrical Machines and Stability

Electrical Power Transmission and Distribution

Communication / Other

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graph LR; A[Communication / Other] --- B[Fluid Mechanics and Thermodynamics]; A --- C[Signals and Systems]; A --- D[Robotics and Control]; A --- E[Communication Engineering]
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Fluid Mechanics and Thermodynamics

Signals and Systems

Robotics and Control

Communication Engineering

Example Areas of Employment

Electronics Industry

- Design engineers
- Product developers
- Quality control
- Production engineers
- Maintenance
- Automation

Electrical Industry

- Test engineers
- Maintenance
- Value added services
- Transmission/distribution/generation

Example Areas of Employment

Information Technology Industry

- System design (Embedded or otherwise)
- Software development
- Network solutions
- Middleware design
- Marketing/customer service/management

Communication Industry

- Value added services
- Network management
- Customer care

Example Areas of Employment

Peripheral Industries

- Instrumentation
- Project management
- Biomedical applications

Other Opportunities

- Research and development
- Teaching
- Self employed entrepreneur

Possible Employers

- Mobile operators
(Dialog/Mobitel/LankaBell)
- CEB/LECO
- Zone24x7
- TV Operators (Rupavahini/Sirasa)
- MIT (Networking/Software)
- MAS
- KBS
- Nikini Automation
- ACL Cables
- Metropolitan
- hSenid
- Virtusa
- IE Technics
- Find out where your seniors have gone for training.
- Sky is the limit

Qualities you need to gather during your program

- Creative mindset
- Perseverance
- Good interpersonal skills
- Logical and analytical thinking
- Time management/ Stress management
- Consistency in activities
- A balance of practical and analytical skills
- Self learning ability (Markets change rapidly)

Additional Information

- Interviewers are smart. Don't bluff with learning.
- Self learn but seek help
- Feedback is extremely important
- Math skills should be sharpened
- The placement of a job is entirely dependent on the technical and interpersonal ability
- People with electrical engineering backgrounds have known to change fields (financial/management/banking)