



School of Engineering

ENGINEERING PROGRAMS

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TAMU

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School of Engineering

- **Pre-engineering** (to any other engineering discipline):
 - TAMIU - TAMU signed on Sep. 6, 2007
 - TAMIU - TAMUK signed on Aug. 14, 2014



School of Engineering

- **BS in Systems Engineering:**
 - Commenced in Fall 2008
 - Graduated over 75 students since 2011
 - ~20% are in graduate school
 - ~25% are in the oil field
 - ~25% are in logistics
 - ~30% other
- **In the plans:**
 - BS in Petroleum Engineering
 - MS in Systems Engineering
 - BS in Civil Engineering
 - BS ?

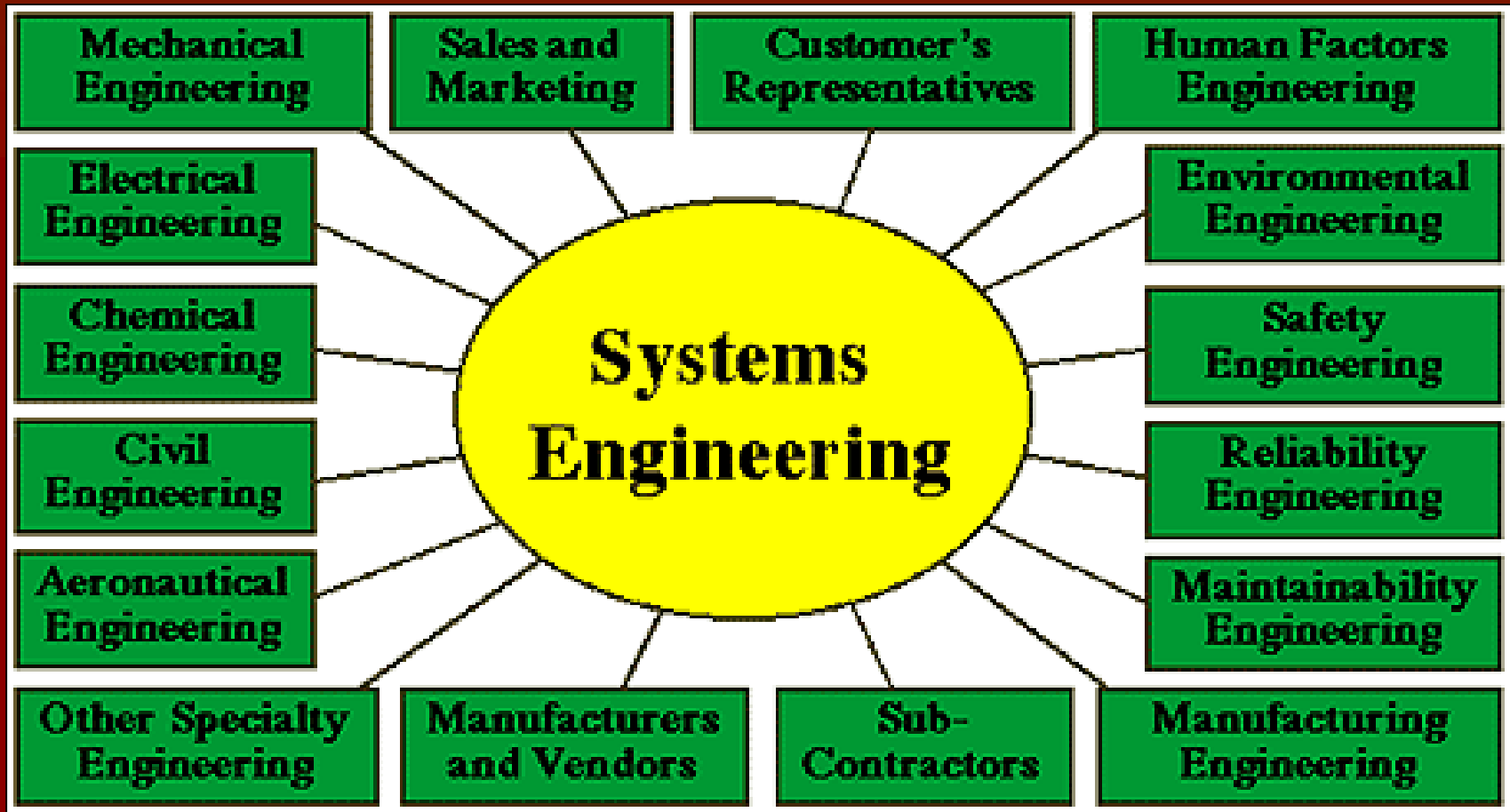


What is Systems Engineering?

“Today’s engineering advances usually rely on more than just one discipline. It is the systems engineer’s job to bring all the people and pieces together and help them work harmoniously while meeting performance and cost goals and keeping on schedule..... Systems engineers are well-vested in all technical areas so they can effectively fulfill their role as team captain.”

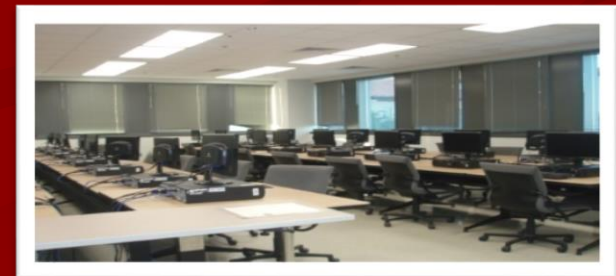
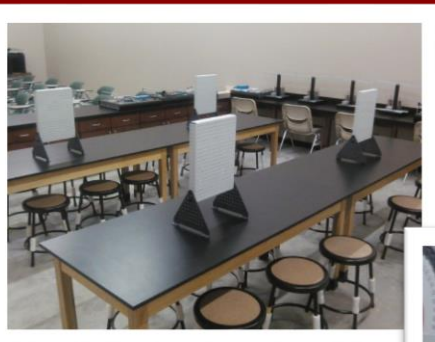
Source: ENGINEERING GO FOR IT, FALL 2007

Systems Engineer's Role

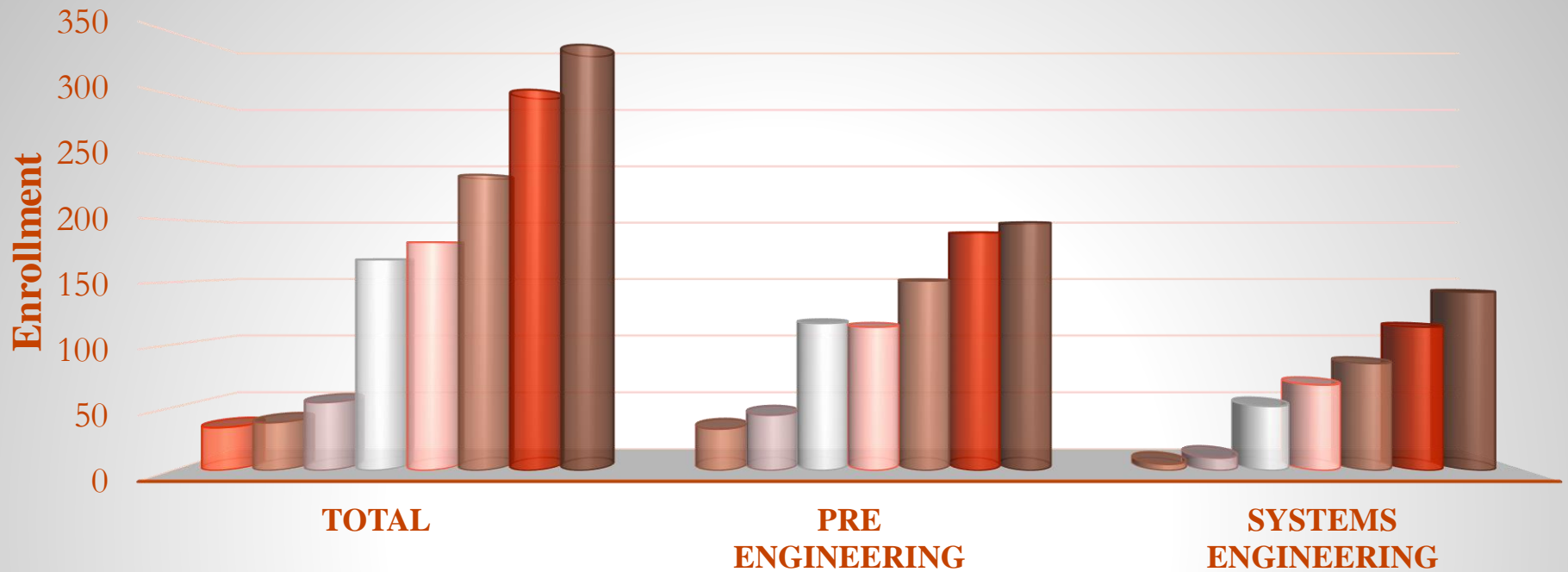


Progress: Laboratories

- Computer Integrated Manufacturing Laboratory
- Electronics Laboratory
- Statics and Dynamics Laboratory
- Robotics and Controls Laboratory
- Computer Laboratories
- Physics Laboratories
- Engineering Foundations Laboratory
- Machine Shop



School of Engineering Student Enrollment



| | Total | | Pre Engineering | | Systems Engineering |
|--------|-------|------|-----------------|--|---------------------|
| ■ 2007 | 34 | | | | |
| ■ 2008 | 38 | 12% | 33 | | 5 |
| ■ 2009 | 54 | 42% | 44 | | 10 |
| ■ 2010 | 168 | 211% | 117 | | 51 |
| ■ 2011 | 182 | 8% | 114 | | 68 |
| ■ 2012 | 236 | 30% | 151 | | 85 |
| ■ 2013 | 304 | 29% | 190 | | 114 |
| ■ 2014 | 340 | 12% | 198 | | 142 |

Progress: Software

LabVIEW (department license)

AutoCAD (campus license)

MSDN – C/C++, MS Project, Visual Studio, etc.

MATLAB/Simulink (100 student concurrent copies)

MATLAB/Simulink (3 faculty copies for research)

SPSS

ARENA for Simulation

QM for Windows (optimization)

Thank You!