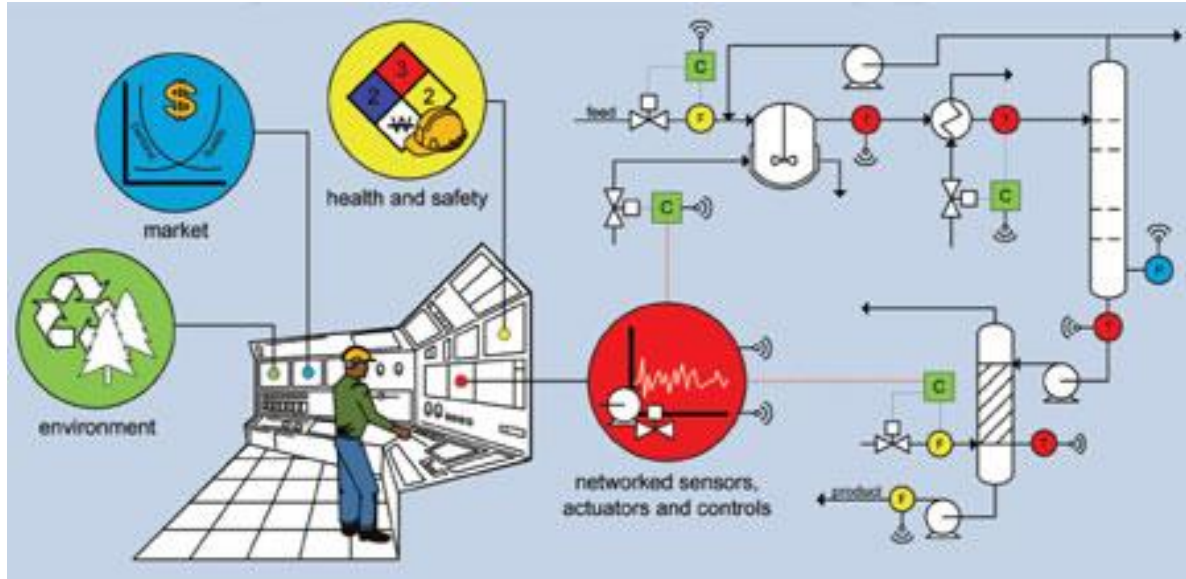


## Computer Assisted Design & Control in Chemical Engineering



Chemical Engineers are expected to make decisions such as;

- ✓ Which products should be manufactured in an industrial production plant?
- ✓ What should be the production scale and strategy?
- ✓ What is the investment and how much profit can be made?

All these decisions are based on systematic knowledge of chemical engineering principles. However, industrial processes are usually large scale and the calculations required for decision-making are not simple. Thus, computer assisted tools are very useful for prior calculations as well as for prediction of potential outcomes.

Employers rank knowledge of computer programming and software skills very highly when selecting potential employees. Thus, in the Chemical Engineering Department at Rowan University we make continuous efforts to integrate classroom teaching with computer assisted tools. Specially, the courses at the junior and senior levels are designed to prepare the students to handle industrial scale problems.

### Computational software available at Rowan University

1. MATLAB and Simulink (<https://www.mathworks.com/products/matlab.html>)
2. Aspen (<https://www.aspentech.com>)
3. COMSOL (<https://www.comsol.com>)
4. GAMS (<https://www.gams.com>)
5. Polymath (<http://www.polymath-software.com>)
6. AutoCAD (<https://www.autodesk.com/products/autocad/overview>)

*And many more.....*

