

BE 4940 Engineering Internship  
EXAMPLE

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Student: Jane Doe Student Number: 00000000  
Semester: Fall 2018 Credit hours: 3

Title: **Pacemaker Manufacturing Intern**

#### Company and Internship Summary

XYZ Corp inc. is a Fortune 500 medical device company that develops technologies to transform the treatment of epidemic diseases. (<http://www.>)

This takes the form of treating primarily cardiovascular diseases and chronic pain conditions.

The internship is in the Pacemaker Manufacturing Operation business unit of the Cardiac Rhythm Management (CRM) division located in Sylmar, California. Pacemakers, Implantable Cardioverter Defibrillators (ICDs), and the leads that allow monitoring and deliver treatment from these devices are manufactured at this location.

#### Project Summary

A consolidation and renovation of the manufacturing clean room is being planned. Combining four separate product clean rooms into one large clean room could provide efficiency gains, productivity improvements, and cost savings. My job is to collect data and create a detailed manufacturing analysis to assist with layout designs for this multiphase renovation.

#### Engineering Content Summary

The pacemaker manufacturing floor will be analyzed and time studies will be performed. Software tools will be used to assist in the data collection and analysis. Data will be analyzed to improved work flow and optimize each assembly area.

A new manufacturing system layout will be developed to optimize the current production lines.

Approved: Intern Work Supervisor – Name and Position Title

Approved: Supervising Faculty Mentor – Name and Position Title

Engineering Content Topics – engineering science and engineering design defined.

**Engineering sciences** have their roots in mathematics and basic sciences but carry knowledge further toward creative application. These studies provide a bridge between mathematics and basic sciences on the one hand and engineering practice on the other.

**Engineering design** is the process of devising a systems, component, or process to meet desired needs. It is a decision-making process (often iterative), in which the basic sciences, mathematics, and the engineering sciences are applied to convert resources optimally to meet these stated needs.

- from ABET–EAC Criteria for Accrediting Engineering Programs, E1 5/25/06