

Experiential Learning: Developing real-life problem-based learning activities through partnership with industry – Engineering Dynamics

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The Team

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Impetus

- Dynamics – an “Engineering Core” course
- Need for relevance - subject matter & real life application
- Traditional Lecture and Homework not meeting needs for many students.... 20% failure rate
- Understand concepts through ownership in learning experience ... Term projects, etc.

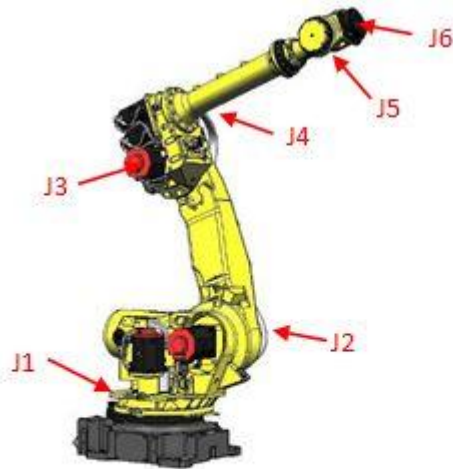
Industry

- The team formation
- Goals
 - Foster students' intuitive, visual, and contextual understandings
 - Begin building a portfolio of “real-world”
 - Increase interest in dynamics and reduce attrition
- Partnership with industry for real life learning experience. Criteria:
 - partner's industrial activities must entail motion and forces
 - Partner proximity
 - Willingness for collaborative work with researchers

Lessons Learned...

- Students
 - Different reasons for selecting problems (3 + 1)
 - Interested in industry problems
 - Different levels of team organization
- Instructor
 - Time management challenge
- Researcher
 - Very helpful in ideas and vision
- Industry
 - Very accommodating to students, instructor, researchers

Thank you



R2000 - maximum reach of 118" in its long arm configuration

