School of Dynamic Systems COLLEGE OF ENGINEERING AND APPLIED SCIENCES

SUMMER RESEARCH OPPORTUNITIES FOR UNDERGRADUATE WOMEN

APPLICATION DEADLINE: March 1, 2013

The School of Dynamic Systems is pleased to offer the following research project for the summer of 2013. Interested students are urged to contact the faculty member(s) directing the project that most interests them. By contacting the faculty member, you can discover more about the project, learn what your responsibilities will be and, if possible, develop a timetable for the twelve-week research period.

Design and Construction of Computer Numerical Controlled Micromachine

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Project Description

Ever wondered how a Computer Numerical Controlled (CNC) Machine works? Want to gain "Hands-On" experience and build a CNC machine?! Interested in *Manufacturing Research*?!! Make use of this project to gain unique summer research experience.

Proposed research work will introduce students to the various aspects of scientific research. The specific learning opportunities for the students include (i) acquiring *hands-on* experience in designing and building a CNC machine, (ii) CAD modeling, (iii) part programming and experimental investigation, and (iv) learning to use measuring microscope and other characterization methods.