

How the University of Minnesota Can Help Your Company Develop New Products

New products are the driver behind successful businesses and the key to maintaining a competitive position in today's market. The University of Minnesota has launched an initiative that creates a novel educational model for teaching the principles of product design and development. The goals of this effort are:

1. To train future leaders of product design and business venture teams.
2. To create new products and business opportunities that return value to sponsoring companies.
3. To improve the process of product design and business development through creating new product design methodologies and entrepreneurial strategies

NPDBD is a University/industry partnership to advance the state of product design and business development

NEXT STEPS

A detailed description of the NPDBD program is available on our web site

www.npdbd.umn.edu

Projects are generally set by August 1. Since discussions to finalize project definitions may take some time, initial contact should be made as soon as possible.

If your company is considering sponsoring a New Product Design and Business Development project, please contact either of the following:

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New Product Design and Business Development

**A program offered jointly by the
Institute of Technology
and the
Carlson School of Management
www.npdbd.umn.edu**

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UNIVERSITY OF MINNESOTA

NEW PRODUCT DESIGN AND BUSINESS DEVELOPMENT

THE COURSE

New Product Design and Business Development is a graduate level course offered jointly by the Carlson School of Management and the Institute of Technology at the University of Minnesota. The course brings together students and faculty with representatives from client business firms to design and develop new products and business plans for those products.

Teams of six to ten students, half second year MBA's and half graduate level engineers, work together for the entire academic year (September to May) to develop a product and business concept. By May, each team is expected to deliver a working physical prototype of the product and an extensive business plan which details production, marketing and financial considerations for the product.

The coaches for the teams include faculty from marketing, operations and entrepreneurial studies within the Carlson School, and from mechanical, electrical and biomedical engineering within the Institute of Technology and the Medical School. Additional coaching is provided by executives, managers and technical personnel from the sponsoring company. The coaches provide instruction in business creation, product design and product development; and have overall responsibility for seeing that the team sets appropriate, realistic goals and proceeds towards them on a timely schedule.

The project teams have access to all of the resources normally provided to students at the University including the libraries, academic computing facilities, machine shops and rapid prototyping machine. Further, students often contact faculty experts throughout the University for information and advice in a variety of relevant areas.

Current and past companies sponsoring projects include 3M, Toro, Medtronic, Boston Scientific, St. Jude, Donaldson, Honeywell, Select Comfort, Andersen Windows Augustine Medical, Sulzer Medica, Tennant, and many start-ups.

PROJECTS

The project must be selected carefully to provide an appropriate educational experience for the students, maximum benefit to the company, and a high probability of success. Projects should have significant engineering content and significant business content to challenge the cross-functional teams. The projects are real and sponsoring companies should be expecting to take the product into production. Generally, projects should start at the early phase of the product development process and not be fully defined for the team. Often, the best choice is a novel product which the sponsor wants to develop, but has insufficient resources to undertake completely in-house.

SPONSORING COMPANY RESPONSIBILITIES

(1) Be committed to the project and prepared to support the team's activities, (2) provide marketing and engineering liaisons to work closely with the team and who can meet once a week on the U of M campus, (3) share company information freely with the team when needed for project progress, (4) support appropriate project prototyping and marketing expenses, (5) have realistic expectations about results.

CONFIDENTIALITY AND INTELLECTUAL PROPERTY

Because the design teams work on real projects, confidentiality and intellectual property issues are dealt with up front. All patent rights are assigned to the company and confidentiality is maintained. We have a standard agreement form which has worked well for past projects. The form can be found on our web site.

FEE

Sponsoring companies pay a project fee of \$25,000 to partially offset the instructional costs associated with the course. Companies with total revenues of under \$1 million per year pay a reduced fee of \$10,000. In addition to this fee companies should be prepared to support appropriate market research and prototyping costs.