

6-16-1982

Grant to Advance Technology

Follow this and additional works at: https://ecommons.udayton.edu/news_rls

Recommended Citation

"Grant to Advance Technology" (1982). *News Releases*. 4250.
https://ecommons.udayton.edu/news_rls/4250

This News Article is brought to you for free and open access by the Marketing and Communications at eCommons. It has been accepted for inclusion in News Releases by an authorized administrator of eCommons. For more information, please contact frice1@udayton.edu, mschlangen1@udayton.edu.



The University of Dayton

News Release

GRANT TO ADVANCE TECHNOLOGY

DAYTON, Ohio, June 16, 1982 -- Several University of Dayton faculty and staff members are working this summer on final proposals for funding under the University's Advanced Technology Challenge Grant. This matching grant project announced in January is to be used to develop a new educational program in advanced technology, or to significantly redesign an existing one. A \$150,000 challenge gift from an anonymous donor last fall was matched by UD to form a \$300,000 challenge grant for promising ideas. The original gift was made in recognition of UD's contributions to this region's status as a major center for advanced technology and in anticipation of its active role in the continued development of such technology.

Earlier this year 15 proposals were submitted to the University's selection committee for the grant. The committee chose four of the original proposals to be further developed. The selected proposals include: graduate study and research in electro-optical sciences; a center for energy engineering; a center for the design of advanced engineering materials; and a center for robotics.

The proposed Electro-Optical Program is based on the cooperative efforts of the Departments of Electrical Engineering and Physics, and the Applied Physics Division of the UD Research Institute. This program would emphasize the sciences that are required in the research and development of modern electro-optical materials such as price scanners, laser cutting, laser surgery, and the vision of robots.

-more-

The Center for Energy Engineering proposal is based on the building of existing strengths developed in the areas of resource recovery, coal, energy storage, solar technology, and other energy-related areas. This Center would have a three-fold mission including education, research, and community service. In addition, this program would couple the technological aspect of energy engineering with the political, economic, and social aspects of energy engineering.

The primary emphasis of the proposed Center for the Design of Advanced Engineering Materials is to establish an innovative academic program in advanced technology that integrates materials engineering and materials processing. Materials engineering is the technology associated with the composition of materials used in structures. Emphasis is placed upon stress concentration, adhesive bonding, and temperature tolerance in this science. The program will have a strong commitment to the application of computers to the design of complex structures using advanced engineering materials.

The Center for Robotics program would develop social studies aimed at defining and alleviating the social disruption expected to occur from the widespread application of robotics. Investigation into artificial intelligence, image processing, economic forecasting, and the theoretical constructs in medicine are just a few examples of this research program's technology. Academic areas would be developed on undergraduate and graduate levels. The importance of this technology base is already recognized as the next step in industrial development.

The full proposals for these programs are being developed this summer to be submitted by August 2, 1982 for review by several UD faculty and staff members, and professionals outside the University community. To be selected, a project must evidence a strong research component; demonstrate creative use of existing University resources; allow for the integration and interaction of undergraduate and graduate activities; offer a realistic organizational plan and financial structure; and aim to prepare persons for the technical, ethical, and moral aspects of their careers.

The goal for the challenge grant program is to ensure that the technological community, the community-at-large, and the citizens of the world benefit from such research and technology advancement.

The selection of the Advanced Technology Challenge Grant Project will be announced at a September 16, 1982 UD faculty meeting.

For more information and interview opportunities contact Ro Nita Hawes at University Communications, 229-3241.