(b)(4), to enter into a written agreement to continue employment in such defense laboratory for a period of service specified in the agreement; or

(2) make such payments without requiring such an agreement.

(d)(1) The Director of the National Security Agency may provide a qualifying employee of a defense laboratory of that Agency with living quarters at no charge, or at a rate or charge prescribed by the Director by regulation, without regard to section 5911(c) of title 5.

(2) In this subsection, the term ''qualifying employee'' means a student who is employed at the National Security Agency under—

(A) a Student Educational Employment Program of the Agency conducted under this section or any other provision of law; or

(B) a similar cooperative or summer education program of the Agency that meets the criteria for Federal cooperative or summer education programs prescribed by the Office of Personnel Management.

(Added Pub. L. 101–510, div. A, title II, § 247(a)(1), Nov. 5, 1990, 104 Stat. 1522; amended Pub. L. 108–136, div. A, title IX, § 926, Nov. 24, 2003, 117 Stat. 1579.)

AMENDMENTS

2003—Subsec. (d). Pub. L. 108–136 added subsec. (d).

### § 2196. Manufacturing engineering education: grant program

(a) ESTABLISHMENT OF GRANT PROGRAM.—(1) The Secretary of Defense shall establish a program under which the Secretary makes grants to support—

(A) the enhancement of existing programs in manufacturing engineering education; or

(B) the establishment of new programs in manufacturing engineering education that meet such requirements.

(2) Grants under this section may be made to institutions of higher education or to consortia of such institutions.

(3) The Secretary shall establish the program in consultation with the Secretary of Education, the Director of the National Science Foundation, and the Director of the Office of Science and Technology Policy.

(b) NEW PROGRAMS IN MANUFACTURING ENGINEERING EDUCATION.—A program in manufacturing engineering education to be established at an institution of higher education may be considered to be a new program for the purpose of subsection (a)(1)(B) regardless of whether the program is to be conducted—

(1) within an existing department in a school of engineering of the institution;

(2) within a manufacturing engineering department to be established separately from the existing departments within such school of engineering; or

(3) within a manufacturing engineering school or center to be established separately from an existing school of engineering of such institution.

(c) MINIMUM NUMBER OF GRANTS FOR NEW PROGRAMS.—Of the total number of grants awarded pursuant to this section, at least one-third shall be awarded for the purpose stated in subsection (a)(1)(B).

(d) GEOGRAPHICAL DISTRIBUTION OF GRANTS.—In awarding grants under this subsection, the Secretary shall, to the maximum extent practicable, avoid geographical concentration of grant awards.

(e) COORDINATION OF GRANT PROGRAM WITH THE NATIONAL SCIENCE FOUNDATION.—The Secretary of Defense and the Director of the National Science Foundation shall enter into an agreement for carrying out the grant program established pursuant to this section. The agreement shall include procedures to ensure that the grant program is fully coordinated with similar existing programs of the National Science Foundation.

(f) COVERED PROGRAMS.—(1) A program of engineering education supported with a grant awarded pursuant to this section shall meet the requirements of this section.

(2) Such a grant may be made for a program of education to be conducted at the undergraduate level, at the graduate level, or at both the undergraduate and graduate levels.

(g) COMPONENTS OF PROGRAM.—The program of education for which such a grant is made shall be a consolidated and integrated multidisciplinary program of education having each of the following components:

(1) Multidisciplinary instruction that encompasses the total manufacturing engineering enterprise and that may include—

(A) manufacturing engineering education and training through classroom activities, laboratory activities, thesis projects, individual or team projects, and visits to industrial facilities, consortia, or centers of excellence in the United States and foreign countries;

(B) faculty development programs;

(C) recruitment of educators highly qualified in manufacturing engineering;

(D) presentation of seminars, workshops, and training for the development of specific research or education skills; and

(E) activities involving interaction between the institution of higher education conducting the program and industry, including programs for visiting scholars or industry executives.

(2) Opportunities for students to obtain work experience in manufacturing through such activities as internships, summer job placements, or cooperative work-study programs.

(3) Faculty and student research that is directly related to, and supportive of, the education of undergraduate or graduate students in advanced manufacturing science and technology because of—

(A) the increased understanding of advanced manufacturing science and technology that is derived from such research; and

(B) the enhanced quality and effectiveness of the instruction that result from that increased understanding.

(h) GRANT PROPOSALS.—The Secretary of Defense, in coordination with the Director of the

National Science Foundation, shall solicit from institutions of higher education in the United States (and from consortia of such institutions) proposals for grants to be made pursuant to this section for the support of programs of manufacturing engineering education that are consistent with the purposes of this section.

(i) MERIT COMPETITION.—Applications for grants shall be evaluated on the basis of merit pursuant to competitive procedures prescribed by the Secretary in consultation with the Director of the National Science Foundation.

(j) SELECTION CRITERIA.—The Secretary may select a proposal for the award of a grant pursuant to this section if the proposal, at a minimum, does each of the following:

(1) Contains innovative approaches for improving engineering education in manufacturing technology.

(2) Demonstrates a strong commitment by the proponents to apply the resources necessary to achieve the objectives for which the grant is to be made.

(3) Provides for the conduct of research that supports the instruction to be provided in the proposed program and is likely to improve manufacturing engineering and technology.

(4) Demonstrates a significant level of involvement of United States industry in the proposed instructional and research activities.

(5) Is likely to attract superior students.

(6) Proposes to involve fully qualified faculty personnel who are experienced in research and education in areas associated with manufacturing engineering and technology.

(7) Proposes a program that, within three years after the grant is made, is likely to attract from sources other than the Federal Government the financial and other support necessary to sustain such program.

(8) Proposes to achieve a significant level of participation by women, members of minority groups, and individuals with disabilities through active recruitment of students from among such persons.

(k) FEDERAL SUPPORT.—The amount of financial assistance furnished to an institution under this section may not exceed 50 percent of the estimated cost of carrying out the activities proposed to be supported in part with such financial assistance for the period for which the assistance is to be provided.

(Added Pub. L. 102–190, div. A, title VIII, § 825(a)(1), Dec. 5, 1991, 105 Stat. 1438.)

PRIOR PROVISIONS

A prior section 2196, added Pub. L. 101–510, div. A, title II, § 247(a)(1), Nov. 5, 1990, 104 Stat. 1523; amended Pub. L. 102–25, title VII, § 701(i)(2), Apr. 6, 1991, 105 Stat. 116, defined ''defense laboratory'', prior to repeal by Pub. L. 102–190, § 825(a)(1). See section 2199 of this title.

IMPLEMENTATION OF GRANT PROGRAM; PRIORITY IN FUNDING

Section 825(b) of Pub. L. 102–190 provided that: ''Within one year after the date of the enactment of this Act [Dec. 5, 1991], the Secretary of Defense, in consultation with the Director of the National Science Foundation, shall award grants under section 2196 of title 10, United States Code (as added by subsection (a)), to institutions of higher education throughout the United States.''

### § 2197. Manufacturing experts in the classroom

(a) ESTABLISHMENT OF PROGRAM.—The Secretary of Defense, in consultation with the Secretary of Education and the Secretary of Commerce, shall conduct a program to support the following activities of one or more manufacturing experts at institutions of higher education:

(1) Identifying the education and training requirements of United States manufacturing firms located in the same geographic region as an institution participating in the program.

(2) Assisting in the development of teaching curricula for classroom and in-factory education and training classes at such an institution.

(3) Teaching such classes and overseeing the teaching of such classes by others.

(4) Improving the knowledge and expertise of permanent faculty and staff of such an institution.

(5) Marketing the programs and facilities of such an institution to firms referred to in paragraph (1).

(6) Coordinating the activities described in the other provisions of this subsection with other programs conducted by the Federal Government, any State, any local government, or any private, nonprofit organization to modernize United States manufacturing firms, especially the regional centers for the transfer of manufacturing technology and programs receiving financial assistance under section 2196 of this title.

(b) MERIT COMPETITION.—Applications for assistance under this section shall be evaluated on the basis of merit pursuant to competitive procedures prescribed by the Secretary.

(c) SELECTION CRITERIA.—The Secretary shall select institutions for the award of financial assistance under this section from among institutions submitting applications for such assistance that—

(1) demonstrate that the proposed activities are of an appropriate scale and a sufficient quality to ensure long term improvement in the applicant's capability to serve the education and training needs of United States manufacturing firms in the same region as the applicant;

(2) demonstrate a significant level of industry involvement and support;

(3) demonstrate attention to the needs of any United States industries that supply manufactured products to the Department of Defense or to a contractor of the Department of Defense; and

(4) meet such other criteria as the Secretary may prescribe.

(d) FEDERAL SUPPORT.—The amount of financial assistance furnished to an institution under this section may not exceed 50 percent of the estimated cost of carrying out the activities proposed to be supported in part with such financial assistance for the period for which the assistance is to be provided. In no event may the amount of the financial assistance provided to an institution exceed $250,000 per year. The period for which financial assistance is provided an institution under this section shall be at least two years unless such assistance is earlier