

(Added Pub. L. 101-189, div. A, title VIII, § 843(d)(1), Nov. 29, 1989, 103 Stat. 1516.)

**§ 2192. Improvement of education in technical fields: general authority regarding education in science, mathematics, and engineering**

(a) The Secretary of Defense, in consultation with the Secretary of Education, shall, on a continuing basis—

(1) identify actions which the Department of Defense may take to improve education in the scientific, mathematics, and engineering skills necessary to meet the long-term national defense needs of the United States for personnel proficient in such skills; and

(2) establish and conduct programs to carry out such actions.

(b)(1) In furtherance of the authority of the Secretary of Defense under any provision of this chapter or any other provision of law to support educational programs in science, mathematics, engineering, and technology, the Secretary of Defense may, unless otherwise specified in such provision—

(A) enter into contracts and cooperative agreements with eligible entities;

(B) make grants of financial assistance to eligible entities;

(C) provide cash awards and other items to eligible entities;

(D) accept voluntary services from eligible entities; and

(E) support national competition judging, other educational event activities, and associated award ceremonies in connection with these educational programs.

(2) The Secretary of Defense may carry out the authority in paragraph (1) through the Secretaries of the military departments.

(3) In this subsection:

(A) The term “eligible entity” includes a department or agency of the Federal Government, a State, a political subdivision of a State, an individual, and a not-for-profit or other organization in the private sector.

(B) The term “State” means any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, the United States Virgin Islands, the Commonwealth of the Northern Mariana Islands, American Samoa, and any other territory or possession of the United States.

(c) The Secretary shall designate an individual within the Office of the Secretary of Defense to advise and assist the Secretary regarding matters relating to science, mathematics, and engineering education and training.

(Added Pub. L. 101-510, div. A, title II, § 247(a)(1), Nov. 5, 1990, 104 Stat. 1521; amended Pub. L. 106-65, div. A, title V, § 580(d)(1), Oct. 5, 1999, 113 Stat. 633; Pub. L. 108-136, div. A, title II, § 233, Nov. 24, 2003, 117 Stat. 1423; Pub. L. 111-383, div. A, title II, § 211(a), Jan. 7, 2011, 124 Stat. 4162.)

AMENDMENTS

2011—Subsec. (b)(2), (3). Pub. L. 111-383 added par. (2) and redesignated former par. (2) as (3).

2003—Subsecs. (b), (c). Pub. L. 108-136 added subsec. (b) and redesignated former subsec. (b) as (c).

1999—Pub. L. 106-65 amended section catchline generally. Prior to amendment, catchline read as follows: “Science, mathematics, and engineering education”.

SCIENCE, MATHEMATICS, AND RESEARCH FOR TRANSFORMATION (SMART) DEFENSE SCHOLARSHIP PILOT PROGRAM

Pub. L. 108-375, div. A, title XI, § 1105, Oct. 28, 2004, 118 Stat. 2074, as amended by Pub. L. 109-163, div. A, title X, § 1056(d), title XI, § 1104(a)-(c), Jan. 6, 2006, 119 Stat. 3440, 3448, 3449; Pub. L. 111-383, div. A, title X, § 1075(h)(5), Jan. 7, 2011, 124 Stat. 4377, which related to a pilot program to provide financial assistance for education in science, mathematics, engineering, and technology skills and disciplines that were determined to be critical to the national security functions of the Department of Defense, was repealed and restated in section 2192a of this title by Pub. L. 109-163, div. A, title XI, § 1104(d)(1)(B), (e)(1), Jan. 6, 2006, 119 Stat. 3450.

DEPARTMENT OF DEFENSE SUPPORT FOR SCIENCE, MATHEMATICS, AND ENGINEERING EDUCATION

Pub. L. 102-190, div. A, title VIII, § 829, Dec. 5, 1991, 105 Stat. 1444, directed Secretary of Defense to develop and submit to Congress a master plan for activities by Department of Defense during each of fiscal years 1993 through 1997 to support education in science, mathematics, and engineering at all levels of education in the United States, with each such plan to be developed in consultation with Secretary of Education, prior to repeal by Pub. L. 104-106, div. A, title X, § 1063(c), Feb. 10, 1996, 110 Stat. 444.

**§ 2192a. Science, Mathematics, and Research for Transformation (SMART) Defense Education Program**

(a) REQUIREMENT FOR PROGRAM.—The Secretary of Defense shall carry out a program to provide financial assistance for education in science, mathematics, engineering, and technology skills and disciplines that, as determined by the Secretary, are critical to the national security functions of the Department of Defense and are needed in the Department of Defense workforce.

(b) FINANCIAL ASSISTANCE.—(1) Under the program under this section, the Secretary of Defense may award a scholarship or fellowship in accordance with this section to a person who—

(A) is a citizen of the United States or, subject to subsection (g), a country the government of which is a party to The Technical Cooperation Program (TTCP) memorandum of understanding of October 24, 1995;

(B) is pursuing an associates degree, undergraduate degree, or advanced degree in a critical skill or discipline described in subsection (a) at an accredited institution of higher education; and

(C) enters into a service agreement with the Secretary of Defense as described in subsection (c).

(2) The amount of the financial assistance provided under a scholarship or fellowship awarded to a person under this subsection shall be an amount determined by the Secretary of Defense.

(3) Financial assistance provided under a scholarship or fellowship awarded under this section may be paid directly to the recipient of such scholarship or fellowship or to an administering entity for disbursement of the funds.

(c) SERVICE AGREEMENT FOR RECIPIENTS OF FINANCIAL ASSISTANCE.—(1) To receive financial assistance under this section—

(A) in the case of an employee of the Department of Defense, the employee shall enter into a written agreement to continue in the employment of the department for the period of obligated service determined under paragraph (2); and

(B) in the case of a person not an employee of the Department of Defense, the person shall enter into a written agreement to accept and continue employment for the period of obligated service determined under paragraph (2)—

(i) with the Department, including by serving on active duty in the Armed Forces; or

(ii) with a public or private entity or organization outside of the Department if the Secretary—

(I) is unable to find an appropriate position for the person within the Department; and

(II) determines that employment of the person with such entity or organization for the purpose of such obligated service would provide a benefit to the Department.

(2) For the purposes of this subsection, the period of obligated service for a recipient of financial assistance under this section shall be the period determined by the Secretary of Defense as being appropriate to obtain adequate service in exchange for such financial assistance. The period of service required of a recipient may not be less than the total period of pursuit of a degree that is covered by such financial assistance. The period of obligated service is in addition to any other period for which the recipient is obligated to serve in the civil service of the United States.

(3) An agreement entered into under this subsection by a person pursuing an academic degree shall include any terms and conditions that the Secretary of Defense determines necessary to protect the interests of the United States or otherwise appropriate for carrying out this section.

(d) EMPLOYMENT OF PROGRAM PARTICIPANTS.—The Secretary of Defense—

(1) may, without regard to any provision of title 5 governing appointment of employees to competitive service positions within the Department of Defense, appoint to a position in the Department of Defense in the excepted service an individual who has successfully completed an academic program for which a scholarship or fellowship under this section was awarded and who, under the terms of the agreement for such scholarship or fellowship, at the time of such appointment, owes a service commitment to the Department;

(2) may, upon satisfactory completion of 2 years of substantially continuous service by an incumbent who was appointed to an excepted service position under the authority of paragraph (1), convert the appointment of such individual, without competition, to a career or career conditional appointment; and

(3) may establish arrangements so that participants may participate in a paid internship for an appropriate period with an industry sponsor.

(e) REFUND FOR PERIOD OF UNSERVED OBLIGATED SERVICE.—(1)(A) A participant in the pro-

gram under this section who is not an employee of the Department of Defense and who voluntarily fails to complete the educational program for which financial assistance has been provided under this section, or fails to maintain satisfactory academic progress as determined in accordance with regulations prescribed by the Secretary of Defense, shall refund to the United States an appropriate amount, as determined by the Secretary.

(B) A participant in the program under this section who is an employee of the Department of Defense and who—

(i) voluntarily fails to complete the educational program for which financial assistance has been provided, or fails to maintain satisfactory academic progress as determined in accordance with regulations prescribed by the Secretary; or

(ii) before completion of the period of obligated service required of such participant—

(I) voluntarily terminates such participant's employment with the Department; or

(II) is removed from such participant's employment with the Department on the basis of misconduct,

shall refund the United States an appropriate amount, as determined by the Secretary.

(2) An obligation to reimburse the United States imposed under paragraph (1) is for all purposes a debt owed to the United States.

(3) The Secretary of Defense may waive, in whole or in part, a refund required under paragraph (1) if the Secretary determines that recovery would be against equity and good conscience or would be contrary to the best interests of the United States.

(4) A discharge in bankruptcy under title 11 that is entered less than five years after the termination of an agreement under this section does not discharge the person signing such agreement from a debt arising under such agreement or under this subsection.

(f) RELATIONSHIP TO OTHER PROGRAMS.—(1) The Secretary of Defense shall coordinate the provision of financial assistance under the authority of this section with the provision of financial assistance under the other authorities provided in this chapter in order to maximize the benefits derived by the Department of Defense from the exercise of all such authorities.

(2) The Secretary of Defense shall seek to enter into partnerships with minority institutions of higher education and appropriate public and private sector organizations to diversify the participants in the program under subsection (a).

(g) LIMITATION ON PARTICIPATION.—(1) The Secretary may not award scholarships or fellowships under this section to more than five individuals described in paragraph (2) per year.

(2) An individual described in this paragraph is an individual who—

(A) has not previously been awarded a scholarship or fellowship under the program under this section;

(B) is not a citizen of the United States; and

(C) is a citizen of a country the government of which is a party to The Technical Cooperation Program (TTCP) memorandum of understanding of October 24, 1995.

(h) INSTITUTION OF HIGHER EDUCATION DEFINED.—In this section, the term “institution of higher education” has the meaning given such term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).

(Added Pub. L. 109–163, div. A, title XI, §1104(d)(1), Jan. 6, 2006, 119 Stat. 3449; amended Pub. L. 110–417, [div. A], title X, §1061(a)(5), Oct. 14, 2008, 122 Stat. 4612; Pub. L. 111–84, div. A, title XI, §1102(a)–(d)(1), Oct. 28, 2009, 123 Stat. 2484, 2485; Pub. L. 113–66, div. A, title XI, §1105(a)(1), Dec. 26, 2013, 127 Stat. 886; Pub. L. 113–291, div. A, title II, §215, Dec. 19, 2014, 128 Stat. 3327; Pub. L. 114–92, div. A, title II, §212, Nov. 25, 2015, 129 Stat. 767; Pub. L. 116–283, div. A, title II, §242, Jan. 1, 2021, 134 Stat. 3488.)

#### CODIFICATION

Section, as added by Pub. L. 109–163, consists of text of Pub. L. 108–375, div. A, title XI, §1105, Oct. 28, 2004, 118 Stat. 2074; Pub. L. 109–163, div. A, title X, §1056(d), title XI, §1104(a)–(c), Jan. 6, 2006, 119 Stat. 3440, 3448, 3449; Pub. L. 111–383, div. A, title X, §1075(h)(5), Jan. 7, 2011, 124 Stat. 4377, which was formerly set out as a note under section 2192 of this title, and was repealed by Pub. L. 109–163, div. A, title XI, §1104(e)(1), Jan. 6, 2006, 119 Stat. 3450.

#### AMENDMENTS

2021—Subsec. (c)(1)(B)(i). Pub. L. 116–283, §242(1), inserted “, including by serving on active duty in the Armed Forces” after “Department”.

Subsec. (d)(3). Pub. L. 116–283, §242(2), added par. (3).

Subsec. (f). Pub. L. 116–283, §242(3), designated existing provisions as par. (1) and added par. (2).

2015—Subsec. (b)(1)(A). Pub. L. 114–92, §212(1), inserted “or, subject to subsection (g), a country the government of which is a party to The Technical Cooperation Program (TTCP) memorandum of understanding of October 24, 1995” after “United States”.

Subsecs. (g), (h). Pub. L. 114–92, §212(2), (3), added subsec. (g) and redesignated former subsec. (g) as (h).

2014—Subsec. (c)(1)(B). Pub. L. 113–291 amended subpar. (B) generally. Prior to amendment, subpar. (B) read as follows: “in the case of a person not an employee of the Department of Defense, the person shall enter into a written agreement to accept and continue employment in the Department of Defense for the period of obligated service determined under paragraph (2).”

2013—Subsec. (b)(2). Pub. L. 113–66 substituted “an amount determined by the Secretary of Defense” for “the amount determined by the Secretary of Defense as being necessary to pay all educational expenses incurred by that person, including tuition, fees, cost of books, laboratory expenses, equipment expenses, and expenses of room and board”.

2009—Subsec. (c)(2). Pub. L. 111–84, §1102(b), substituted “The” for “Except as provided in subsection (d), the” in second sentence.

Subsec. (d). Pub. L. 111–84, §1102(a), amended subsec. (d) generally. Prior to amendment, subsec. (d) provided that, under certain circumstances, the Secretary of Defense could appoint or retain a SMART program participant as an interim employee and separate such participant from employment if no appropriate permanent position was available at the end of the interim period and that the period of interim service would count towards the participant’s obligated service requirements.

Subsec. (f). Pub. L. 111–84, §1102(c), struck out “The program under this section is in addition to the authorities provided in chapter 111 of this title.” before “The Secretary” and substituted “the other authorities provided in this chapter” for “the authorities provided in such chapter”.

Subsecs. (g), (h). Pub. L. 111–84, §1102(d)(1), redesignated subsec. (h) as (g) and struck out former subsec.

(g). Prior to amendment, text read as follows: “Not later than February 1, 2007, the Secretary of Defense shall submit to the Committees on Armed Services of the Senate and the House of Representatives, the Committee on Governmental Affairs of the Senate, and the Committee on Government Reform of the House of Representatives a plan for expanding and improving the national defense science and engineering workforce educational assistance program carried out under this section as appropriate to improve recruitment and retention to meet the requirements of the Department of Defense for its science and engineering workforce on a short-term basis and on a long-term basis.”

2008—Subsec. (e)(4). Pub. L. 110–417, §1061(a)(5)(A), substituted “title 11” for “title 11, United States Code.”

Subsec. (f). Pub. L. 110–417, §1061(a)(5)(B), substituted “this title” for “title 10, United States Code”.

#### NATIONAL SECURITY WORKFORCE AND EDUCATIONAL DIVERSITY ACTIVITIES

Pub. L. 116–283, div. A, title II, §250, Jan. 1, 2021, 134 Stat. 3495, provided that:

“(a) IN GENERAL.—The Secretary of Defense shall seek to diversify participation in the Science, Mathematics, and Research for Transformation (SMART) Defense Education Program under section 2192a of title 10, United States Code.

“(b) ACTIVITIES.—In carrying out subsection (a), the Secretary shall—

“(1) subject to the availability of appropriations for this purpose, set aside funds for financial assistance, scholarships, and fellowships for students at historically Black colleges or universities or at minority institutions of higher education and such other institutions as the Secretary considers appropriate;

“(2) partner with institutions of higher education, and such other public and private sector organizations as the Secretary considers appropriate, to increase diversity of participants in the program described in subsection (a);

“(3) establish individual and organizational incentives, and such other activities as the Secretary considers appropriate, to increase diversity of student participation in the program described in subsection (a);

“(4) increase awareness of opportunities to participate in the program described in subsection (a);

“(5) evaluate the potential for new programs, fellowships, and other activities at historically Black colleges or universities and minority institutions of higher education to increase diversity in educational and workforce development programs;

“(6) identify potential changes to the program described in subsection (a) that would improve diversity of participants in such program; and

“(7) establish metrics to evaluate success of activities under this section.

“(c) REPORT.—Not later than September 30, 2024, the Secretary of Defense shall submit to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] a report that evaluates the success of activities conducted by the Secretary in increasing diversity in appropriate programs of the Department of Defense and hiring and retaining diverse individuals in the science, mathematics, and research workforce of the public sector.”

#### EFFECT ON CURRENT PARTICIPANTS IN SMART PILOT PROGRAM

Pub. L. 109–163, div. A, title XI, §1104(f), Jan. 6, 2006, 119 Stat. 3450, provided that: “Participation in the Science, Mathematics, and Research for Transformation (SMART) Defense Scholarship Pilot Program under section 1105 of Public Law 108–375 [see Codification note above] by an individual who has entered into an agreement under that pilot program before the date of the enactment of this Act [Jan. 6, 2006] shall be

governed by the terms of such agreement without regard to the amendments made by this section [enacting this section, amending section 3304 of Title 5, Government Organization and Employees, and amending and repealing provisions set out as a note under section 2192 of this title].”

**§ 2192b. Program on enhancement of preparation of dependents of members of armed forces for careers in science, technology, engineering, and mathematics**

(a) PROGRAM REQUIRED.—The Secretary of Defense shall carry out a program to—

- (1) enhance the preparation of students at covered schools for careers in science, technology, engineering, and mathematics; and
- (2) provide assistance to teachers at covered schools to enhance preparation described in paragraph (1).

(b) COORDINATION.—In carrying out the program, the Secretary shall coordinate with the following:

- (1) The Secretaries of the military departments.
- (2) The Secretary of Education.
- (3) The National Science Foundation.
- (4) Other organizations as the Secretary of Defense considers appropriate.

(c) ACTIVITIES.—Activities under the program may include the following:

- (1) Establishment of targeted internships and cooperative research opportunities at defense laboratories and other technical centers for students and teachers at covered schools.
- (2) Establishment of scholarships and fellowships for students at covered schools.
- (3) Efforts and activities that improve the quality of science, technology, engineering, and mathematics educational and training opportunities for students and teachers at covered schools, including with respect to improving the development of curricula at covered schools.
- (4) Development of travel opportunities, demonstrations, mentoring programs, and informal science education for students and teachers at covered schools.

(d) METRICS.—The Secretary shall establish outcome-based metrics and internal and external assessments to evaluate the merits and benefits of activities conducted under the program with respect to the needs of the Department of Defense.

(e) COVERED SCHOOLS DEFINED.—In this section, the term “covered schools” means elementary or secondary schools at which the Secretary determines a significant number of dependents of members of the armed forces are enrolled.

(Added Pub. L. 116-92, div. A, title II, §211(a), Dec. 20, 2019, 133 Stat. 1254.)

**§ 2193. Improvement of education in technical fields: grants for higher education in science and mathematics**

(a)(1) The Secretary of Defense may, in accordance with the provisions of this subsection, carry out a program for awarding grants to students who have been accepted for enrollment in,

or who are enrolled in, an institution of higher education as undergraduate or graduate students in scientific and engineering disciplines critical to the national security functions of the Department of Defense.

(2) Grant proceeds shall be disbursed on behalf of students awarded grants under this subsection to the institutions of higher education at which the students are enrolled. No grant proceeds shall be disbursed on behalf of a student until the student is enrolled at an institution of higher education.

(3) The amount of a grant awarded a student under this subsection may not exceed the student’s cost of attendance.

(4) The amount of a grant awarded a student under this subsection shall not be reduced on the basis of the student’s receipt of other forms of Federal student financial assistance, but shall be taken into account in determining the eligibility of the student for those other forms of Federal student financial assistance.

(5) The Secretary shall give priority to awarding grants under this subsection in a manner likely to stimulate the interest of women and members of minority groups in pursuing scientific and engineering careers. The Secretary may consider the financial need of applicants in making awards in accordance with such priority.

(b) In this section:

(1) The term “institution of higher education” has the meaning given such term in section 101 of the Higher Education Act of 1965.

(2) The term “cost of attendance” has the meaning given such term in section 472 of the Higher Education Act of 1965 (20 U.S.C. 1087*ll*).

(Added Pub. L. 101-510, div. A, title II, §247(a)(1), Nov. 5, 1990, 104 Stat. 1521; amended Pub. L. 105-244, title I, §102(a)(2)(A), Oct. 7, 1998, 112 Stat. 1617; Pub. L. 106-65, div. A, title V, §580(c)(2), (3), (d)(2), Oct. 5, 1999, 113 Stat. 633.)

REFERENCES IN TEXT

Section 101 of the Higher Education Act of 1965, referred to in subsec. (b)(1), is classified to section 1001 of Title 20, Education.

AMENDMENTS

1999—Pub. L. 106-65, §580(d)(2), amended section catchline generally. Prior to amendment, catchline read as follows: “Science and mathematics education improvement program”.

Subsec. (b). Pub. L. 106-65, §580(c)(3), redesignated subsec. (c) as (b).

Pub. L. 106-65, §580(c)(2), redesignated subsec. (b) as section 2193a of this title.

Subsec. (c). Pub. L. 106-65, §580(c)(3), redesignated subsec. (c) as (b).

1998—Subsec. (c)(1). Pub. L. 105-244 substituted “section 101 of the Higher Education Act of 1965” for “section 1201(a) of the Higher Education Act of 1965 (20 U.S.C. 1141(a))”.

EFFECTIVE DATE OF 1998 AMENDMENT

Amendment by Pub. L. 105-244 effective Oct. 1, 1998, except as otherwise provided in Pub. L. 105-244, see section 3 of Pub. L. 105-244, set out as a note under section 1001 of Title 20, Education.