

CHAPTER 431

AN ACT concerning access to engineering and science careers and supplementing chapter 71B of Title 18A of the New Jersey Statutes.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

C.18A:71B-104 Definitions relative to engineering and science careers.

1. As used in this act:

“Partner high school” means a high school that has been selected for participation in the New Jersey “Accessing Careers in Engineering and Science (ACES) Program” pursuant to subsection a. of section 3 of this act.

“Public or independent research university” means Rutgers, The State University of New Jersey, Rowan University, the New Jersey Institute of Technology, Montclair State University, Stevens Institute of Technology, Princeton University, and Seton Hall University.

“Underrepresented student” means a student who is a member of an underserved community or a member of a group that is underrepresented in the STEM fields.

C.18A:71B-105 “Accessing Careers in Engineering and Science (ACES) Program.”

2. a. The Secretary of Higher Education shall establish the New Jersey “Accessing Careers in Engineering and Science (ACES) Program.” The purposes of the program are to increase the participation of underrepresented students in the science, technology, engineering, and mathematics (STEM) fields; and to develop a larger and more diverse STEM workforce in the State. The ACES Program shall consist of two components: (1) a residential pre-college summer program for selected high school students established pursuant to section 3 of this act; and (2) an undergraduate ACES Scholar program established pursuant to section 4 of this act.

b. The secretary shall select up to seven public or independent research universities in New Jersey to implement the ACES Program, based upon the university’s interest in participating in the program and subject to the availability of funds. A public or independent research university that wants to participate shall submit an application to the secretary, which includes a proposal for implementing both the pre-college summer program and the undergraduate ACES Scholar program in accordance with sections 3 and 4 of this act. The university’s proposal shall also include the university’s plans for funding its share of the program costs and for obtaining the necessary private sector funding pursuant to section 5 of this act.

C.18A:71B-106 Residential pre-college summer program.

3. a. Each research university that participates in the ACES Program shall establish a residential pre-college summer program for selected underrepresented high school students who attend a partner high school. Partner high schools shall be selected by the research university, in consultation with the Secretary of Higher Education, based on certain criteria including the high school’s population of underrepresented students, socioeconomic status, the availability of rigorous STEM coursework, and a supportive school administration. During each school year, teachers and school counselors at a partner high school shall identify and nominate talented underrepresented students for participation in the ACES pre-college program for the upcoming summer. Each student who is selected for the pre-college summer program shall receive a tuition-free scholarship to participate in the program and travel stipends, if necessary.

b. The ACES pre-college summer program at each participating research university shall consist of a one or two-week immersive, residential program that introduces high school students to a range of topics in science, engineering, mathematics, and technology in a hands-on learning environment. The program shall provide the students with exposure to the college experience and encourage the students to pursue an education in the STEM fields. The pre-college summer program and follow-up activities at each participating research university shall include, at a minimum, the following components:

- (1) exposure to the STEM disciplines with a focus on hands-on learning;
- (2) engagement with faculty, staff, and current students at the university during and after the pre-college summer program;
- (3) counseling on the college admissions and financial aid processes;
- (4) introduction to successful university graduates who work in the STEM fields in New Jersey, including corporate site visits to STEM and technology companies;
- (5) customized college visit days during the college admissions process for students who attended the pre-college summer program; and
- (6) professional development programs for teachers and school counselors at the partner high schools.

C.18A:71B-107 Undergraduate ACES Scholar program.

4. a. Each research university that participates in the ACES Program shall establish an undergraduate ACES Scholar program, which provides talented underrepresented students who have been accepted for admission to the university and who are interested in pursuing a degree in a STEM discipline, with generous financial aid packages and enhanced academic support as they pursue their baccalaureate degrees. In selecting students for participation in the undergraduate ACES Scholar program, the university may give preference to students who previously participated in the ACES pre-college summer program.

b. The undergraduate ACES Scholar program at each participating research university shall include, at a minimum, the following components:

- (1) admissions and financial aid workshops for high school students interested in applying for the undergraduate ACES Scholar program;
- (2) a substantial scholarship package for each student selected to participate in the ACES Scholar program, including support for tuition, fees, and living expenses;
- (3) customized campus visit days for the ACES Scholars and their families;
- (4) enhanced academic support services for the ACES Scholars throughout the pursuit of their college degrees;
- (5) mentorship programs, including faculty and peer mentoring;
- (6) alumni networking opportunities;
- (7) opportunities for co-operative education and internship programs with New Jersey STEM companies; and
- (8) any other services as determined by the research university to assist the ACES Scholars in acclimating to college and succeeding as they pursue their STEM degrees.

c. The Secretary of Higher Education may require, as a condition of participating in the ACES Scholar program and receiving scholarship funds, that the participating students commit to working in the State of New Jersey for four years after graduating from the research university.

C.18A:71B-108 Funding.

5. The New Jersey ACES Program established pursuant to this act shall be funded equally by three sectors: the State of New Jersey; the participating public or independent research universities; and the State's private sector. The State shall fund one-third of the annual total program costs through appropriations, and the participating research universities shall fund one-third of the annual total program costs. The participating research universities shall be responsible for soliciting and securing the remaining one-third of program costs from the New Jersey private sector including corporations and companies representative of the STEM industry.

C.18A:71B-109 Annual report.

6. Each research university that participates in the ACES Program shall annually submit a report on the program to the Secretary of Higher Education in a time and manner as determined by the secretary. The report shall include, but not be limited to:

- a. the number of eligible underrepresented students who were nominated for the pre-college summer program and who applied for admission to the university;
- b. the number of eligible underrepresented students who participated in the pre-college summer program and who enrolled in the university;
- c. the number and percentage of pre-college summer program students who participated in the undergraduate ACES Scholar program;
- d. the number and percentage of pre-college summer program students who enrolled in a STEM undergraduate degree program;
- e. the annual retention rate of undergraduate students who enrolled in the university after participating in the pre-college summer program;
- f. the graduation rate and employment data for students who participated in the undergraduate ACES Scholar program, including the corporations and companies employing the students; and
- g. the amount of private funding secured by the university from the State's private sector, including from corporations and companies representative of the STEM industry.

C.18A:71B-110 Rules, regulations.

7. The Secretary of Higher Education shall adopt rules and regulations pursuant to the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.), necessary to effectuate the purposes of this act.

8. This act shall take effect immediately.

Approved January 21, 2020.