

[Second Reprint]

**SENATE, No. 659**

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**STATE OF NEW JERSEY**  
**220th LEGISLATURE**

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PRE-FILED FOR INTRODUCTION IN THE 2022 SESSION

**Sponsored by:**

**Senator STEVEN V. OROHO**

**District 24 (Morris, Sussex and Warren)**

**Senator LINDA R. GREENSTEIN**

**District 14 (Mercer and Middlesex)**

**Co-Sponsored by:**

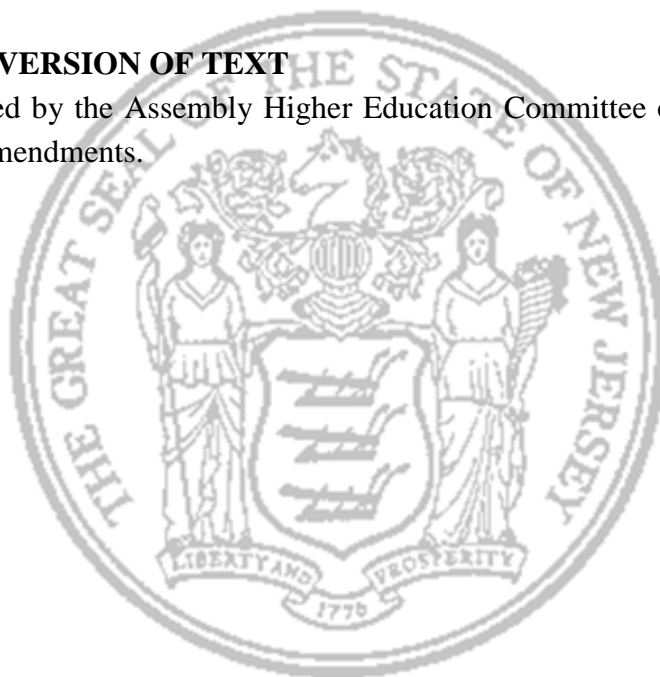
**Senators Corrado, Singleton, Testa, Cunningham, Gopal, A.M.Bucco,  
Zwicker, Ruiz and O'Scanlon**

**SYNOPSIS**

“Manufacturing in Higher Education Act”; requires various State entities to promote manufacturing career pathways for students and provides assistance to manufacturing industry.

**CURRENT VERSION OF TEXT**

As reported by the Assembly Higher Education Committee on October 13, 2022, with amendments.



**(Sponsorship Updated As Of: 6/16/2022)**

1 AN ACT concerning the promotion of the manufacturing industry in  
2 higher education and supplementing Title 18A of the New Jersey  
3 Statutes, Title 34 of the Revised Statutes, and Title 52 of the  
4 Revised Statutes.

5

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

8

9 1. <sup>1</sup>**[This]** Sections 3 through 5 of this<sup>1</sup> act shall be known and  
10 may be cited as the “Manufacturing in Higher Education Act.”

11

12 2. a. The <sup>1</sup>**[Secretary of Higher Education]** Commissioner of  
13 Labor and Workforce Development<sup>1</sup>, in consultation with the  
14 Commissioner of Education, the <sup>1</sup>**[Commissioner of Labor and**  
15 **Workforce Development]** Secretary of Higher Education<sup>1</sup>, the New  
16 Jersey Council of County Colleges, <sup>2</sup>**[the New Jersey Council of**  
17 **County Vocational Schools,]**<sup>2</sup> and representatives of the business  
18 community, shall <sup>1</sup>**[design a]** promote and support the  
19 implementation of the<sup>1</sup> manufacturing career pathway <sup>1</sup>**[to be]**<sup>1</sup>  
20 offered through the <sup>1</sup>**[county colleges and county vocational school**  
21 **districts]** New Jersey Pathways to Career Opportunities Initiative  
22 operated by the New Jersey Community College Consortium for  
23 Workforce Development<sup>1</sup> to provide students interested in pursuing  
24 a career in manufacturing with the instruction and skills necessary  
25 to gain employment in the manufacturing or advanced  
26 manufacturing sectors.

27 b. The manufacturing career pathway required pursuant to  
28 subsection a. of this section shall include traditional and advanced  
29 manufacturing processes and methods of production including, but  
30 not limited to, the machinery, technology, tools, and equipment  
31 used in a wide range of manufacturing industries.

32 <sup>1</sup>c. The Commissioner of Labor and Workforce Development  
33 shall adopt rules and regulations pursuant to the “Administrative  
34 Procedure Act,” P.L.1968, c.410 (C.52:14B-1 et seq.), necessary to  
35 effectuate the purposes of this section.<sup>1</sup>

36

37 <sup>1</sup>**[3. a. The Secretary of Higher Education, in consultation with**  
38 **the Commissioner of Labor and Workforce Development and the**  
39 **New Jersey Economic Development Authority, shall establish the**  
40 **New Jersey STEM Entrepreneur Fellowship Program in county**  
41 **colleges and four-year institutions of higher education.**

42 b. The secretary shall work in consultation with the New Jersey  
43 Economic Development Authority and the Commissioner of Labor

EXPLANATION – Matter enclosed in bold-faced brackets **[thus]** in the above bill is  
not enacted and is intended to be omitted in the law.

Matter underlined thus is new matter.

Matter enclosed in superscript numerals has been adopted as follows:

<sup>1</sup>Senate SBA committee amendments adopted June 6, 2022.

<sup>2</sup>Assembly AHI committee amendments adopted October 13, 2022.

1 and Workforce Development to fund no less than 20 fellowships,  
2 administered by the secretary, which focus on supporting  
3 entrepreneurs in the Science, Technology, Engineering and  
4 Mathematics (STEM) fields. The fellowships may be provided to  
5 individuals who have proven to the secretary that they have an idea  
6 to create, advance or develop a product in the STEM field which  
7 will have a beneficial impact on society and will result in a self-  
8 sustaining business in the future.

9 The fellowships shall be issued for three years each and shall be  
10 used primarily to support the entrepreneurs in commercializing the  
11 idea and developing a well-structured business.

12 Priority will be given to fellowships which are submitted with  
13 the support of an incubator supported by the State of New Jersey or  
14 any of its public entities.

15 c. The secretary, in consultation with the New Jersey  
16 Economic Development Authority, shall conduct an evaluation of  
17 the effectiveness of the New Jersey STEM Entrepreneur Fellowship  
18 Program to establish new businesses no later than five years after  
19 the approval of the first fellowship. <sup>1</sup>

20

21 <sup>1</sup>[4.] 3.<sup>1</sup> a. The Secretary of Higher Education shall establish  
22 a “Higher Education Manufacturing Grant Program.” The program  
23 shall be administered by a three-person commission which shall  
24 include: the Secretary of Higher Education, or a designee, who shall  
25 serve as chair of the commission; a representative of the New Jersey  
26 Manufacturing Extension Program; and a representative of the New  
27 Jersey Community College Consortium for Workforce and  
28 Economic Development. The commission shall annually award \$10  
29 million to New Jersey institutions of higher education, proprietary  
30 institutions, and county vocational school districts for the purpose  
31 of establishing or expanding programs in the manufacturing fields  
32 <sup>1</sup>, and marketing and promoting current programs in the  
33 manufacturing fields<sup>1</sup>. The grants shall be allocated on a  
34 competitive basis and shall be distributed as follows:

35 (1) 50 percent of program funding shall be awarded to county  
36 colleges;

37 (2) 25 percent of program funding shall be awarded to four-year  
38 institutions of higher education and proprietary institutions; and

39 (3) 25 percent of program funding shall be awarded to county  
40 vocational school districts.

41 b. A grant recipient shall use the funds to establish or expand  
42 programs and curricula in the fields of manufacturing,  
43 manufacturing engineering, or advanced manufacturing. <sup>1</sup>A grant  
44 recipient may also use the funds for marketing and promoting  
45 current programs in the manufacturing fields.<sup>1</sup>

46 c. To be eligible for consideration of a grant award, an  
47 institution of higher education, proprietary institution, or county

1 vocational school district shall submit an application to the  
2 commission, in accordance with application procedures and  
3 requirements prescribed by the secretary. A grant application shall  
4 include a complete description of the applicant's specific plans and  
5 objectives for the use of the grant funds and any other information  
6 specified by the secretary. <sup>1</sup>A grant application from a county  
7 college or county vocational school district <sup>2</sup>**[shall]** <sup>2</sup>**may** <sup>2</sup> also  
8 include a description of how the applicant would integrate their  
9 program into existing workforce development programs, including  
10 the manufacturing program within the New Jersey Pathways to  
11 Career Opportunities Initiative operated by the New Jersey  
12 Community College Consortium for Workforce and Economic  
13 Development.<sup>1</sup>

14 d. The commission, in accordance with any rules prescribed by  
15 the secretary, shall establish selection criteria for the awarding of  
16 grant funds under the program, and shall award grants through a  
17 competitive process based upon review of the applications and  
18 subject to the availability of funds. The commission shall establish  
19 the amount for each grant that is approved.

20 e. As used in this section, "proprietary institution" shall be  
21 limited to proprietary institutions that have received accreditation  
22 from an accrediting body recognized by the United States  
23 Department of Education.

24  
25 <sup>1</sup>**[5.] 4.**<sup>1</sup> a. There is created within the Office of the Secretary  
26 of Higher Education a fund to be known as the "Higher Education  
27 Manufacturing Grant Fund." The fund shall be used to provide  
28 grants to New Jersey institutions of higher education, proprietary  
29 institutions, and county vocational school districts under the  
30 "Higher Education Manufacturing Grant Program" established  
31 pursuant to section <sup>2</sup>**[4] 3**<sup>2</sup> of P.L. , c. (C. ) (pending before  
32 the Legislature as this bill).

33 b. The fund shall be annually credited with money appropriated  
34 by the State, any moneys received by the State from corporate  
35 donors or other private sector support, and any federal funds which  
36 may become available for higher education and manufacturing-  
37 related purposes.

38  
39 <sup>1</sup>**[6.] 5.**<sup>1</sup> The Secretary of Higher Education shall adopt rules  
40 and regulations pursuant to the "Administrative Procedure Act,"  
41 P.L.1968, c.410 (C.52:14B-1 et seq.), necessary to effectuate the  
42 purposes of <sup>1</sup>**[section 2 through section 5]** sections 3 and 4<sup>1</sup> of  
43 P.L. , c. (C. ) (pending before the Legislature as this bill).

44  
45 <sup>1</sup>**[7.] a.** The Commissioner of Education, in consultation with  
46 the Secretary of Higher Education, the Business Action Center in  
47 the Department of State, the New Jersey Manufacturing Extension

1 Program, and representatives of business and industry, shall  
2 establish and maintain a State-recognized list of industry-  
3 recognized credentials in the advanced manufacturing field to assist  
4 county vocational school districts, institutions of higher education,  
5 and the workforce development system in developing appropriate  
6 educational programs to enable students to more adequately meet  
7 the advanced technical training needs in this field.

8 b. The Commissioner of Education, in consultation with the  
9 Secretary of Higher Education, the Business Action Center in the  
10 Department of State, the New Jersey Manufacturing Extension  
11 Program, and representatives of business and industry, shall identify  
12 courses of study for careers in emerging manufacturing industries,  
13 including careers in industrial marketing, mechanical engineering,  
14 computer science, electronics, and mechatronics. **1**

15

16 **1**[8.] 6.<sup>1</sup> The Secretary of State, in consultation with the  
17 Commissioner of Labor and Workforce Development, shall  
18 designate an 1existing or newly hired<sup>1</sup> employee of the 1Business  
19 Action Center in the<sup>1</sup> Department of State to act as a liaison  
20 between the State and manufacturing businesses located in this  
21 State. The duties of the liaison shall be to assist manufacturing  
22 businesses by:

23 a. advertising manufacturing businesses' products or services  
24 nationally and internationally through the Business Action Center in  
25 the Department of State; **1**[and]<sup>1</sup>

26 b. establishing a business referral service where manufacturing  
27 businesses may be referred to other State, federal, or private  
28 business resource organizations, such as the New Jersey  
29 Manufacturing Extension Program, the State's Small Business  
30 Development Centers, and other business organizations that provide  
31 specialized business development assistance, technology  
32 information, consulting management, and customized one-to-one  
33 counseling concerning business plans and technical assistance with  
34 significant business topics and issues<sup>1</sup>; and

35 c. identifying and promoting opportunities throughout the State  
36 for postsecondary pathway programs to actively reskill and upskill  
37 the current workforce to better meet the needs of manufacturing  
38 fields<sup>1</sup>.

39

40 **1**[9.] 7.<sup>1</sup> a. The Secretary of State, in consultation with the  
41 Commissioner of Labor and Workforce Development, the New  
42 Jersey Economic Development Authority, and other State  
43 departments, agencies, boards, commissions, and authorities, shall  
44 direct resources, create incentives, and provide technological,  
45 financial, and workforce development opportunities for  
46 manufacturing businesses.

1       b. The Secretary of State may call upon any department,  
2 authority, commission, board, office, division, or agency of the  
3 State to provide any information, resources, or other assistance  
4 deemed necessary to carry out the provisions of P.L. , c. (C. )  
5 (pending before the Legislature as this bill). This may include, but  
6 not be limited to: the New Jersey Economic Development Authority  
7 for assistance with manufacturing business funding assistance  
8 programs; the Department of Labor and Workforce Development  
9 for assistance with developing workforce development strategies for  
10 manufacturing businesses; the Department of Transportation and  
11 the New Jersey Transit Corporation for assistance with enhancing  
12 public transportation operations for employees of manufacturing  
13 businesses; the Business Action Center in the Department of State  
14 for assistance with manufacturing business attraction, retention, and  
15 expansion efforts and advising on smart growth development  
16 strategies; and the Department of Community Affairs for assistance  
17 to manufacturing businesses participating in the urban enterprise  
18 zone program established by P.L.1983, c.303 (C.52:27H-60 et al.).  
19

20       <sup>1</sup>10. a. The New Jersey Economic Development Authority, in  
21 consultation with the Business Action Center created in the  
22 Department of State and an institution of higher education, may  
23 designate an institution of higher education or other entity as a  
24 manufacturing and production business resource center to provide  
25 services and assistance to manufacturing businesses to assist them  
26 to modernize, maximize their efficiency, and expand their  
27 production through the development and commercialization of  
28 innovative products.

29       b. The authority shall grant this designation to any institution  
30 of higher education or other entity that meets qualifications  
31 established by the authority. The authority shall base the  
32 qualifications upon the ability of the institution or entity to provide  
33 specialized services and information to manufacturing and  
34 production facilities, which may include specialization in discrete  
35 aspects of the manufacturing and production process, or to provide  
36 more comprehensive services.

37       c. The authority shall refer a manufacturing business deemed  
38 eligible by the authority to a manufacturing and production business  
39 resource center or other organization qualified to provide services  
40 to small and mid-sized manufacturing businesses, which services  
41 shall include, but not be limited to:

42       (1) assistance with product development, including:

43       (a) a preliminary technical evaluation of a product and any  
44 design and materials issues,

45       (b) assistance in providing a connection with available research  
46 and development resources, prototype development resources, and  
47 product evaluation and testing resources, and

- 1 (c) the selection, implementation and optimization of available  
2 technologies;
- 3 (2) assistance in production planning and inventory control;
- 4 (3) assistance in identifying appropriate factory and office  
5 automation and modernizing production capacity;
- 6 (4) assistance in identifying sources of supply, including any  
7 Internet-based listing of New Jersey-based suppliers of goods and  
8 services;
- 9 (5) assistance in establishing a quality assurance program;
- 10 (6) assistance with market analysis and development, including  
11 assistance in identifying export opportunities, provided by the  
12 Business Action Center;
- 13 (7) assistance with distribution issues;
- 14 (8) assistance in developing the skills of the existing workforce  
15 or procuring skilled workers;
- 16 (9) referral to financing resources; and
- 17 (10) assistance in preliminary patent and trademark searches. ]<sup>1</sup>
- 18

19 <sup>1</sup>[11.] 8.<sup>1</sup> a. There is created in the New Jersey State  
20 Employment and Training Commission, established pursuant to  
21 section 5 of P.L.1989, c.293 (C.34:15C-2), the New Jersey  
22 Advanced Manufacturing Council.

23 b. The council shall consist of 11 members who are individuals  
24 with experience in the fields of labor, education, or workforce  
25 development or training. The <sup>1</sup>[11 members shall be appointed by  
26 the]<sup>1</sup> Governor <sup>1</sup>shall appoint nine members<sup>1</sup> as follows: <sup>1</sup>[two  
27 members] one member<sup>1</sup> shall be recommended by the Senate  
28 President; <sup>1</sup>[two members] one member<sup>1</sup> shall be recommended by  
29 the Speaker of the General Assembly; one member shall be  
30 recommended by the Minority Leader of the Senate; one member  
31 shall be recommended by the Minority Leader of the General  
32 Assembly; and, five members shall be recommended by the  
33 Governor. <sup>1</sup>The co-chairs of the Legislative Manufacturing Caucus  
34 shall serve as ex officio members of the council.<sup>1</sup> The members  
35 <sup>1</sup>appointed by the Governor<sup>1</sup> shall be appointed for five-year terms,  
36 except, of the members first appointed, <sup>1</sup>[four] three<sup>1</sup> members  
37 shall be appointed for five-year terms, <sup>1</sup>[four member] three  
38 members<sup>1</sup> shall be appointed for three-year terms, and three  
39 members shall be appointed for four-year terms. Each <sup>1</sup>appointed<sup>1</sup>  
40 member shall hold office for the term of appointment and until a  
41 successor is appointed and qualified. A member appointed to fill a  
42 vacancy occurring in the <sup>1</sup>appointed<sup>1</sup> membership of the council for  
43 any reason other than the expiration of the term shall have a term of  
44 appointment for the unexpired term only. Vacancies shall be filled  
45 in the same manner as the original appointment. A member may be  
46 appointed for any number of successive terms. Any member  
47 appointed may be removed from the council by the appointing

1 authority, as the case may be, for cause, after a hearing and may be  
2 suspended by the appointing authority pending the completion of  
3 the hearing.

4 c. Members of the council shall serve without compensation,  
5 but may be reimbursed for necessary expenses incurred in the  
6 performance of their duties as members. Action may be taken and  
7 motions and resolutions may be adopted by the council at a council  
8 meeting by an affirmative vote of a majority of the members. The  
9 council shall elect from its members a chairperson. Advanced  
10 notification for, and copies of the minutes of, each meeting of the  
11 council shall be filed with the Governor, the President of the  
12 Senate, and the Speaker of the General Assembly.

13

14 <sup>1</sup>**[12.] 9.**<sup>1</sup> The council shall:

15 a. convene and enable industry-led, private-public partnerships  
16 focused on engaging New Jersey institutions of higher education in  
17 manufacturing innovation;

18 b. design and implement an advanced manufacturing initiative  
19 to facilitate collaboration and information sharing across State  
20 departments and agencies;

21 c. assist private companies to enhance technological transfer in  
22 New Jersey manufacturing industries to help companies overcome  
23 technical obstacles to scaling up production of new technologies;  
24 and

25 d. submit an annual report to the Governor, to the Legislature  
26 pursuant to section 2 of P.L.1991, c.164 (C.52:14-19.1), and to the  
27 State Employment and Training Commission, of its assessments and  
28 recommendations to enhance State policy related to the advanced  
29 manufacturing industry in New Jersey.

30

31 <sup>1</sup>**[13.] 10.**<sup>1</sup> The council is authorized to:

32 a. hold public hearings;

33 b. employ staff, responsible to the Executive Director of the  
34 State Employment and Training Commission, to assist the council  
35 to implement the purposes of this act; and

36 c. avail itself of the services of the employees and have access  
37 to the records of any instrumentality of the State, as necessary or  
38 useful to implement the purposes of this act.

39

40 <sup>1</sup>**[14.] 11.**<sup>1</sup> This act shall take effect immediately.