

DATE: May 20, 2021

SUBJECT: New Academic Program
East Tennessee State University
Orthotics and Prosthetics, Master of Science (MS)
(CIP 51.2307: Orthotist/Prosthetist)

ACTION RECOMMENDED: Approval

PROGRAM DESCRIPTION

East Tennessee State University (ETSU) proposes a Master of Science in Orthotics and Prosthetics which is a specialized healthcare profession that combines a unique blend of clinical and technical skills needed to care for patients who have neuromuscular and musculoskeletal disorders and/or patients who have a partial or total absence of a limb. The proposed program will require 70 credit hours and include didactic, lab, and clinical experiences.

The addition of the proposed program would complement the existing Doctor of Physical Therapy (DPT) and proposed Doctor of Occupational Therapy (OTD) to provide a variety of physical rehabilitation programs offered through the College of Clinical and Rehabilitative Health Sciences at ETSU. The proposed program will seek accreditation from Commission on Accreditation of Allied Health Education Programs and the National Commission on Orthotic and Prosthetic Education.

INSTITUTIONAL GOVERNING BOARD APPROVAL

The proposed Orthotics and Prosthetics, Master of Science program was approved by the East Tennessee State University Board of Trustees on April 23, 2021.

PROPOSED IMPLEMENTATION DATE

Summer 2022

ALIGNMENT WITH STATE MASTER PLAN AND INSTITUTIONAL MISSION/STRATEGIC PLAN

The proposed orthotics and prosthetics program will align with the State Master Plan through the creation of a graduate degree program for immediate entry into a high need field in Tennessee and will also contribute to the research needs of health across the state.

The proposed program aligns with ETSU’s Mission, Vision, and Strategic Plan as follows:

- Create a graduate degree program that will contribute to and benefit from the educational and research programs and clinical services available through the Academic Health Sciences Center.

- Contribute to regional stewardship and wise use of human and financial resources by providing students with an opportunity to obtain a degree at a lower cost than those offered at surrounding private institutions.
- Provide students with options for clinical experiences and service to diverse and underserved populations in order to better prepare them to provide rehabilitative services for those populations.

CURRICULUM

The proposed 70 credit hour curriculum will include both didactic and lab coursework along with clinical experiences. The proposed curriculum emphasizes in-depth knowledge and skills in patient assessment and intervention with a strong focus on disease, body structure and body system functions, while integrating activity limitations, participation restrictions, and contextual factors. The curriculum has been developed on the foundation of the biomechanical model and is informed and supported by the International Classification of Functioning, Disability, and Health framework. Additionally, the proposed Orthotics and Prosthetics, MS will utilize a problem-based learning approach with an interprofessional focus, which will prepare graduates to practice with appropriate skills and expertise in diverse practice settings that require collaboration and teamwork and the ability to overcome silos that are prominent in traditional healthcare curricula.

Five curricular themes will be woven into the proposed curriculum: interprofessional education; research and evidence-based practice; foundational knowledge; professional development; and integration of theory to clinical practice. Additionally, program outcomes will ensure graduates are able to:

- Exemplify the role of the orthotist/prosthetist in providing ethical, patient-centered care by applying accepted professional responsibilities in clinical practice experiences.
- Assess safety of self and others and adhere to safety procedures throughout the provision of orthotic/prosthetic services.
- Comprehend and demonstrate knowledge of the collaborative role of the orthotist/prosthetist as a member of the interdisciplinary rehabilitation team in providing patient-centered care.
- Critique evidence-based practice with an understanding of the research processes and how to use research findings to appropriately inform and influence clinical practice.
- Integrate knowledge of the fundamental concepts of human function (physical, cognitive, social, psychological) with the practice framework of assessment, formulation, implementation, and follow-up of a comprehensive orthotic / prosthetic treatment plan.
- Formulate clinical decisions designed to meet patient needs and expectations and measure effectiveness of orthotic and prosthetic intervention by utilizing (or administering) appropriate outcome measures.
- Demonstrate the ability to provide effective education to patients, their support networks, health care professionals, and the public at large.

The proposed program will require the development of 18 new courses specific to the study of orthotics and prosthetics. Three courses will be delivered online over the summer in order to provide flexibility for students who will be engaged in off-campus clinical experiences over the summer.

PROGRAM PRODUCTIVITY

The proposed Orthotics and Prosthetics, MS program projects an initial enrollment of 15 students increasing to a consistent 29 students by year two. Attrition rates are calculated at five percent. The proposed program projects a consistent 14 graduates annually starting in year two.

	2022	2023	2024	2025	2026
Enrollment	15	29	29	29	29
Graduates	--	--	14	14	14

PROGRAM DUPLICATION

Currently, there are no graduate level orthotics and prosthetics programs in the state of Tennessee. As of March 2021, there are only 13 accredited orthotics and prosthetics programs accepting students across the United States.

EXTERNAL JUDGEMENT

An external review of the proposed program was conducted during a virtual institutional site visit on October 30, 2020. Rebecca Spragg, Assistant Professor and Program Coordinator of Orthotics and Prosthetics in the School of Health Promotion and Human Performance at Eastern Michigan University served as the external reviewer for the proposed program. The site visit included meetings with campus administrators, faculty, prospective students, and community partners.

Ms. Spragg made a recommendation for approval of the proposed program and commented: “This proposed Orthotics and Prosthetics [O&P] program at East Tennessee is well positioned, both geographically and academically to meet the growing needs of the orthotic and prosthetic community. One of the most notable aspects of the proposed program is the focus on inter-professional education. This is a much needed area, to increase the exposure of O&P to other healthcare professionals, as well as to develop orthotic and prosthetic students as an essential part of the healthcare team. The integration of the physical therapy and occupational therapy programs into the course work of the orthotics and prosthetics program will be a benefit to the students and faculty of all of the programs, and ultimately an enormous benefit to the healthcare field and the patients they will serve in the future. This will be a noteworthy advantage of the ETSU program.”

STUDENT DEMAND

A survey was distributed to current ETSU undergraduate students registered for minors offered in the College of Clinical and Rehabilitative Health Sciences. Seventy students

responded and out of those responses, sixty percent of students indicated interest in pursuing a master's degree in an orthotics and prosthetics program offered at ETSU. Additionally, only five institutions in the southeast currently offer a master's degree in Orthotics and Prosthetics (Alabama, Florida, Georgia, and Texas) making the Academic Common Market a possibility for students from other states.

OPPORTUNITIES FOR PROGRAM GRADUATES

Graduates from the proposed program will be qualified to seek board certification and licensing as orthotics and prosthetics practitioners. According to the Bureau of Labor Statistics, orthotics and prosthetics occupations in Tennessee are projected to grow at a faster rate (22 percent) than the projected growth for all occupations in the state between 2016 and 2026 (seven percent). Nationally, the number of Americans with diagnosed diabetes is projected to increase 165 percent by 2050 and currently 50-70 percent of all amputations are diabetes related indicating a likely increase in the number of qualified practitioners in the future. Additionally, according to an analysis of information provided by Burning Glass Technologies, an analytics software company that provides real-time data on labor market trends, competitive saturation is low for the orthotics and prosthetics degree and if approved would be the only program within 400 miles.

Letters of support for the proposed program were provided by regional employers such as Mountain Home Veterans Administration Medical Center; Holston Medical Group; TalkBack Pediatric Therapy; Victory Orthotics and Prosthetics; and Excel Prosthetics and Orthotics.

INSTITUTIONAL CAPACITY TO DELIVER THE PROGRAM

The proposed program will be housed in the College of Clinical and Rehabilitative Health Sciences and in the Department of Rehabilitative Sciences which currently houses an undergraduate program in Rehabilitative Health Sciences, undergraduate and graduate programs in Nutrition and Dietetics, a Physical Therapy Doctorate program, and the proposed Occupational Therapy Doctorate (OTD) program. The proposed program will require 18 new courses and use 10 existing courses that are being developed for the proposed OTD program. Three full-time faculty positions will be required to support the proposed program which includes the program director.

ASSESSMENT AND POST-APPROVAL MONITORING

An annual performance review of the proposed program will be conducted for the first five years following program approval. The review will be based on benchmarks established in the approved proposal. At the end of this period, the campus, institutional governing board, and THEC staff will perform a summative evaluation. The benchmarks include, but are not limited to, enrollment and graduation, program cost, progress toward accreditation, and other metrics set by the institution and staff. If benchmarks are not met during the monitoring period, the Commission may recommend that the institutional governing board terminate the program. If additional time is needed and requested by the institutional governing board, the Commission may choose to extend the monitoring period.

Tennessee Higher Education Commission
Attachment A: THEC Financial Projections
East Tennessee State University
Orthotics & Prosthetics

Seven-year projections are required for doctoral programs.
Five-year projections are required for baccalaureate and Master's degree programs
Three-year projections are required for associate degrees and undergraduate certificates.
Projections should include cost of living increases per year.

	Planning Year	Year 1	Year 2	Year 3	Year 4	Year 5
I. Expenditures						
A. One-time Expenditures						
New/Renovated Space	500,000	\$ -	\$ -	\$ -	\$ -	\$ -
Equipment	500,000	-	-	-	-	-
Library	-	-	-	-	-	-
Consultants	10,000	-	-	-	-	-
Travel	-	-	-	-	-	-
Other	-	-	-	-	-	-
Sub-Total One-time	\$ 1,010,000	\$ -	\$ -	\$ -	\$ -	\$ -
B. Recurring Expenditures						
Personnel						
Administration						
Salary						\$ -
Benefits						-
Sub-Total Administration	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Faculty						
Salary	\$ 90,000	\$ 272,700	\$ 280,881	\$ 289,307	\$ 297,987	\$ 306,926
Benefits	30,350	91,961	94,719	97,561	100,488	103,502
Sub-Total Faculty	\$ 120,350	\$ 364,661	\$ 375,600	\$ 386,868	\$ 398,474	\$ 410,429
Support Staff						
Salary		\$ 40,000	\$ 41,200	\$ 42,436	\$ 43,709	\$ 45,020
Benefits		20,350	20,961	21,589	22,237	22,904
Sub-Total Support Staff	\$ -	\$ 60,350	\$ 62,161	\$ 64,025	\$ 65,946	\$ 67,924
Graduate Assistants						
Salary	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Benefits	-	-	-	-	-	-
Tuition and Fees* (See Below)	-	-	-	-	-	-
Sub-Total Graduate Assistants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating						
Travel	\$ 6,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Dues	5,000	2,500	2,500	2,500	2,500	2,500
Utilities	-	20,000	20,000	20,000	20,000	20,000
University Administration	-	82,781	151,825	156,379	161,071	165,903
Other_Lab Supplies	-	25,000	25,000	25,000	25,000	25,000
Sub-Total Operating	\$ 11,000	\$ 140,281	\$ 209,325	\$ 213,879	\$ 218,571	\$ 223,403
Total Recurring	\$ 131,350	\$ 565,292	\$ 647,086	\$ 664,773	\$ 682,991	\$ 701,756
TOTAL EXPENDITURES (A + B)	\$ 1,141,350	\$ 565,292	\$ 647,086	\$ 664,773	\$ 682,991	\$ 701,756

	Planning Year	Year 1	Year 2	Year 3	Year 4	Year 5
II. Revenue						
Tuition and Fees ¹	-	338,637	616,302	631,485	647,123	663,230
Institutional Reallocations ²	1,141,350	226,655	30,784	33,288	35,868	38,526
Federal Grants ³	-	-	-	-	-	-
Private Grants or Gifts ⁴	-	-	-	-	-	-
Other ⁵	-	-	-	-	-	-
BALANCED BUDGET LINE	\$ 1,141,350	\$ 565,292	\$ 647,086	\$ 664,773	\$ 682,991	\$ 701,756

Notes:

7 year total revenue/(loss)

(1) In what year is tuition and fee revenue expected to be generated and explain any differential fees. Tuition and fees include maintenance fees, out-of-state tuition, and any applicable earmarked fees for the program.

Tuition and fee revenue will be generated in year two of the program. Fees are \$110 per credit hour, which includes an Academic Health Science Center (AHSC) fee at ETSU at \$50.00 per credit hour for courses taught within the AHSC. An additional \$60 program fee per credit is included to cover costs of lab operations and supplies for the MSOP program. This course fee is earmarked for the college that generates the credit hours.

(2) Please identify the source(s) of the institutional reallocations, and grant matching requirements if applicable.

Institutional reallocations will be funded from the College of Clinical and Rehabilitative Health Sciences carryover and contingency funding.

(3) Please provide the source(s) of the Federal Grant including the granting department and CFDA(Catalog of Federal Domestic Assistance) number.

N/A

(4) Please provide the name of the organization(s) or individual(s) providing grant(s) or gift(s).

N/A

(5) Please provide information regarding other sources of the funding.

N/A