

Tab 9, Attachment A: FastTrack Academic Program Approval

Institution	Program Area	CIP Code	Justification	Comments
University of Missouri	Engineering Technologies/Technicians	15.00	Demand in engineering technology professions is projected to grow significantly. One of the top jobs for graduates of Engineering Technology programs is General and Operations managers, for which there are 2,335 annual openings in Missouri. Employment concentration is higher in Missouri than would be expected for a state of our size (location quotient = 1.25). As indicated in MERIC's Long-Term Occupational Projections for Missouri, expected employment in management occupations, business and financial operations occupations, and architecture and engineering occupations (all of which intersect with skills conferred by ET programs) are expected to grow 9.4%, 7.5%, and 10.2% by 2030, with a net increase of 32,302 jobs during this period.	Associated occupations are identified as high career grade/high demand in Missouri.
University of Missouri	Data Science, General	30.70	According to Lightcast, graduates of these programs in Missouri will be competitive for 2,695 Missouri jobs annually. Workforce demand for these occupations is projected to increase by 35.8% from 2021-2032. These occupations are well-paying, with median earnings of \$90,400 per year. Top jobs include software developers, postsecondary teachers, computer and information systems managers, and software quality assurance analysts.	Associated occupations are not identified as high career grade/high demand in Missouri.

			There were 24,447 unique job postings for related occupations from May 2022 to May 2023.	
University of Missouri	Biology, General	26.01	Occupations in this field are projected to grow significantly, by 23.6%, over the next decade, including significant 56.85% growth in annual demand for Biological Scientists, representing over 200 annual openings in Missouri. Demand for Biological Scientists is concentrated in Missouri relative to the rest of the nation, with a high location quotient of 1.84. Graduates of these programs earn a competitive salary (median \$85,500 per year). Top job titles include Clinical Research Coordinators, Biologists, and Project Engineers, and Medical Laboratory Scientists.	Associated occupations are not identified as high career grade/high demand in Missouri without additional education.
University of Missouri	Biochemistry, Biophysics and Molecular Biology	26.02	Occupations in this field are projected to grow significantly, by 23.6%, over the next decade, including significant 56.85% growth in annual demand for Biological Scientists, representing over 200 annual openings in Missouri. Demand for Biological Scientists is concentrated in Missouri relative to the rest of the nation, with a high location quotient of 1.84. Graduates of these programs earn a competitive salary (median \$85,500 per year). Top job titles include Clinical Research Coordinators, Biologists, and Project Engineers, and Medical Laboratory Scientists.	Associated occupations are not identified as high career grade/high demand in Missouri without additional education.

University of Missouri	General Sales, Merchandising and Related Marketing Operations	52.18	There are 9,842 annual Missouri job openings for which graduates of these programs will be competitive. This includes over 200 annual openings for Marketing Managers (35.9% projected growth over the next decade) and over 800 annual openings for Market Research Analysts (27.5% projected growth over the next decade). Top employers for these occupations in the state include Edward Jones, Walmart, Centene, Boeing, Marriott International, Walgreens, Spectrum, and Deloitte.	Associated occupations are not identified as high career grade/high demand in Missouri. Entry for many occupations does not require postsecondary education.
University of Missouri	Specialized Sales, Merchandising and Marketing Operations	52.19	There are 9,842 annual Missouri job openings for which graduates of these programs will be competitive. This includes over 200 annual openings for Marketing Managers (35.9% projected growth over the next decade) and over 800 annual openings for Market Research Analysts (27.5% projected growth over the next decade). Top employers for these occupations in the state include Edward Jones, Walmart, Centene, Boeing, Marriott International, Walgreens, Spectrum, and Deloitte.	Associated occupations are not identified as high career grade/high demand in Missouri. Entry for many occupations does not require postsecondary education.

University of Missouri	International Business	52.11	This field is projected to grow by 13.7% over the next decade, with a projected 10,495 annual openings for which graduates of these programs will be competitive for in the state of Missouri. This includes significant demand for General and Operations Managers, with 2,335 annual openings and a median wage of \$38/hour; as well as Project Management Specialists, with nearly 700 annual openings and a median wage of \$39/hour.	Associated occupations are identified as high career grade/high demand in Missouri.
University of Missouri	Design and Applied Arts	50.04	This field is projected to grow by 30.1% over the next decade, with 4,328 annual openings for which graduates of these programs will be competitive in the state of Missouri. Students, who may choose to pair this with another type of degree or certificate, could be competitive for jobs as software developments, market analysts, industrial engineers, graphic designers, sales and marketing managers, advertising agents, etc.	Associated occupations are not identified as high career grade/high demand in Missouri.
University of Missouri	Statistics	27.05	This field is projected to grow by 41.0% over the next decades. Statistics is an increasingly important and versatile field, preparing students for a wide range of jobs across various industries. Graduates of statistics programs can go on to be Data Scientists (68% projected growth), Statisticians (25% projected growth), and Actuaries (22% projected growth). Relevant occupations for statistics graduates come with a competitive median salary of \$80,200 per year.	Related occupations tend to be high wage but demand is low.

University of Missouri	Political Science and Government	45.10	This field is projected to grow by 19.3% over the next decade, with 2,674 annual openings in the state of Missouri. Top occupations for graduates include Management Analysts (14% projected growth), Public Relations Specialists (20% projected growth), Compliance Officers (17% projected growth), Operations Research Analysts (44% projected growth), and several others.	Associated occupations are not identified as high career grade/high demand in Missouri without additional education.
University of Missouri	History	54.01	CIP 13.1328 (History Teacher Education) is currently Fast Track approved, and for similar reasons we request approval for this program. Occupations for graduates of these programs are heavily concentrated in education, with 746 annual openings for secondary school teachers and 547 annual openings for middle school teachers. In addition to seeking a History Education degree, students will also often pursue the degree in the core discipline.	Associated occupations are not identified as high career grade/high demand in Missouri without additional education.
CTS Beauty Academy	Cosmetology and Related Grooming Services	12.04	Allow me to emphasize the significant role of the cosmetology field in today's society. Cosmetologists, barbers, nail technicians, and other professionals within the industry continue to experience growth and high demand. In fact, according to a recent review of the 2022 Bureau of Labor Statistics wage data sheet, cosmetologists in the state of Missouri earn an annual salary of up to \$57,900 (see attached tables). Furthermore, "Overall	Related occupations tend to be high wage but demand is low.

			Compliance Officers (17% projected growth), Operations Research Analysts (44% projected growth), and several others.	
University of Missouri			In Missouri: - Employment (2020): 12,180 employees - Projected employment (2030): 13,520 employees - Projected growth (2020-2030): 11% Projected annual job openings (2020-2030): 1,530	
Empowering Empires	Entrepreneurial and Small Business Operations	52.07	Our school offers a program for Administrative Assistants. The course prepares students for work in any industry as a receptionist, administrator, office manager, and many other diverse career choices. This program coincides with business programs that are now offered on the Fast Track list of programs depending on how far the student wants to go in their career endeavors. I have enclosed some statistics for various areas students can be employed through our certificate.	Already a Fast Track Eligible CIP.
Wellspring School of Allied Health	Somatic Bodywork and Related Therapeutic Services	51.35	There is great demand for this program in multiple markets in Missouri. We constantly have employers, particularly the massage franchises in the state, asking for us to expand our programs, partner or start a school in their market. Massage Luxe is currently trying to partner with us to open a school in St. Louis because they cannot get enough graduates to keep their stores near capacity. Employment outlook for massage therapists is very good and we believe will continue to grow.	Associated occupations are identified as moderate demand in Missouri, but low wage.

Truman State University	Agriculture Science	01.00	<p>Agriculture is a vital industry in Missouri that employs many residents in a variety of roles. These jobs are particularly important in our rural communities where the cost of living is lower and where technical jobs are less likely to be located. When metrics of income attainment are used to determine eligible programs, agriculture risks being excluded to the detriment of the rural communities our universities – particularly our land grant institutions – serve. While agricultural equipment programs are captured by the current FastTrack list, this narrow category excludes those programs that develop the foundational expertise to engage in the science of agriculture. It should be noted that there is an increasing intersection between Environmental Science (currently on the FastTrack list) and Agriculture. While jobs in Environmental Science may have higher income potential, the fields are highly complementary. According to the Bureau of Labor Statistics, Agriculture and Food Science jobs are predicted to grow by 6% through 2032, which is faster than average. According to the 2021 Economic Contribution Study of Missouri Agriculture and Forestry, prepared by the Missouri Agricultural and Small Business Development Authority, crop and livestock production accounted for 236,520 Missouri jobs and \$14.9 billion in value added to the Missouri economy. 82 counties derive at least 20% of their jobs from agriculture.</p>	<p>Associated occupations are not identified as high career grade/high demand in Missouri.</p>
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		<p>where technical jobs are less likely to be located. When metrics of income attainment are used to determine eligible programs, agriculture risks being excluded to the detriment of the rural communities our universities – particularly our land grant institutions – serve. While agricultural equipment programs are captured by the current FastTrack list, this narrow category excludes those programs that develop the foundational expertise to engage in the science of agriculture. It should be noted that there is an increasing intersection between Environmental Science (currently on the FastTrack list) and Agriculture. While jobs in Environmental Science may have higher income potential, the fields are highly complementary. According to the Bureau of Labor Statistics, Agriculture and Food Science jobs are predicted to grow by 6% through 2032, which is faster than average. According to the 2021 Economic Contribution Study of Missouri Agriculture and Forestry, prepared by the Missouri Agricultural and Small Business Development Authority, crop and livestock production accounted for 236,520 Missouri jobs and \$14.9 billion in value added to the Missouri economy. 82 counties derive at least 20% of their - jobs from agriculture.</p>	<p>grade/high demand in Missouri.</p>
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Truman State University	Data Science	30.70	<p>Business Analytics has already been approved (30.71) and significantly overlaps with Data Science methodologically. While Business Analytics tends to have more specific applications of Data Science concepts to business contexts, Data Science students can apply their skills to business, healthcare, and other fields where “Big Data” is used, making instruction in the field more foundational to a variety of workforce contexts represented elsewhere in the current FastTrack list. Data Science programs also draw heavily on the programming skills of Computer Science, which has also been approved previously. The Data Science field has shown significantly high demand both in Missouri and nationally and many new programs in the field have been added in Missouri in the last several years. The federal CIP code system does not sufficiently account for the close convergence of these fields. Companies that track job growth data in this area often do not make a distinction between Data Science/Data Analytics/Business Analytics. According to Lightcast, Data Science jobs are projected to grow by 32% through 2032.</p>	<p>While the skillset may be valuable, the degree area in and of itself is not high demand. Net change in employment is currently relatively small in absolute numbers.</p>
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Truman State University	Statistics	27.05	<p>The fields of Business Analytics, Computer Science, Data Science, and Statistics have seen increasing convergence in recent years, particularly as statistical methods are being applied to larger and larger datasets by practitioners of Business Analytics and Data Science. Many Statistics programs now incorporate Data Science tracks into their programs and Data Science is housed in several Computer Science departments. Like the case made for Data Science, a strong case can be made that the federal CIP code system does not meaningfully articulate the close methodological and technological relationships that exist between these adjacent fields. While Statistics may not appear as in demand when measured only by its field name, its application to Data Science and Business Analytics, and its proximity to Mathematics and Computer Science (which have already been approved for FastTrack) makes it an appropriate choice for inclusion. According to Lightcast, Statistics jobs are predicted to grow by 28% through 2032.</p>	<p>Related occupations tend to be high wage but low demand.</p>
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Pawsperity	Agricultural and Domestic Animal Services	01.05	<p>Pawsperity’s proprietary dog grooming program should be considered for Fast Track because it is a program that provides a skill set needed to meet the growing demands of a rapidly expanding animal care industry. Not only are we meeting the needs of a growing industry, but we are also economically changing the landscape for each of our graduates, their families, and the communities they live in. Our students start our program at or below the poverty line and many of them on government assistance, they complete our program with the skills to earn a livable wage with the average graduate earning \$41,500 within the first year according to a UMKC independent program evaluation. Once graduates have been in the field for 2–6 years, earnings can range from \$50,000–\$100,000.</p> <p>According to the Missouri Occupational Outlook website projections for 2020-2030 nonfarm animal caregivers, of which dog groomers are included, are expected to grow by 27%. The same website lists nonfarm animal caregivers as one of the fastest growing occupations in Kansas City with a short-term growth rate of 5% in 2022-2024.</p> <p>According to Career One Stop, which uses data from the U.S. Department of Labor Bureau of Labor Statistics, the earning potential at the national level for Animal Caretakers shows a mean annual salary of \$32,106. In Missouri, annual salaries range from \$23,490 to \$38,420.</p>	Associated occupations are not identified as requiring additional education beyond high school.
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Metropolitan Community College	Engineering Technology/Technicians, General	15.00	<p>Metropolitan Community College recommends inclusion based on occupational demand for additional new workers in the linked occupations for Engineering Technology (i.e., Architecture, Civil, Computer, and Electronics, Mechanical and Manufacturing, Mechatronics, and Building and Modeling Engineering) as a result of separation demand, which translates to the replacement of workers in this industry that retire or move into different occupations.</p> <p>Job growth in the linked occupations for Engineering Technology is not anticipated over the next seven years; however, replacement workers will be needed as more Baby Boom workers retire and normal work attrition occurs. Consider Architectural Engineering Technicians; over the next seven years, in the MCC regional service area alone, roughly 750 replacement workers will be needed (JobsEQ, 2022).</p>	Associated occupations are identified as high career grade/high demand in Missouri.
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Metropolitan Community College	Linguistic, Comparative, and Related Language Studies and Services	16.01	<p>Metropolitan Community College recommends inclusion based on a slight annual growth increase and occupational demand for additional new workers in the job field of Foreign Language Interpreting as a result of separation demand, which translates to the replacement of workers in this industry that retire or move into different occupations.</p> <p>When using a one-year forecast, the Foreign Language Interpreting job field is anticipated to grow by .5%; additionally, 19 replacement workers will be needed as workers exit (retire) and normal work attrition occurs (JobsEQ, 2023Q2). Another important consideration when looking at the job field of Foreign Language Interpreters is the population in the MCC Service Region who speak a language other than English at home. Looking at the U.S. Census Bureau's American Community Survey (Table S1601, S1602 & S1603), 92,921 people in 2022 (7.7% of the MCC Survey Region Population) spoke a language other than English in their home. Considering many of these individuals use healthcare, education, and other services, a need for Foreign Language Interpreters in the MCC Service Region exists. Additionally, 87 replacement workers will be needed in the MCC regional service area as workers exit (retire) and normal work attrition occurs (JobsEQ, 2023).</p>	Associated occupations are not identified as high career grade/high demand in Missouri
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			<p>University, University of Missouri-Columbia, University of Missouri-Kansas City, and Washington University (Biomedical Engineering); Missouri State University (Biomedical Physics); Missouri Baptist University (Biotechnology); and Three Rivers College (Pre-Medical Laboratory Technology, Pre-Occupational Therapy Assistant, and Pre-Physical Therapy Assistant).</p> <p>SEMO has previously requested to add Biology to its approved Fast Track inventory, and our request has been denied. The reason cited was "The proposed CIP does not tie closely enough without additional education and training to high-demand occupations. Related science teacher education programs would likely already be approved under CIPs 1312 and 1313." However, SEMO contends that Biology (CIP 2601) is significantly different than "related science teacher education." Further, we dispute the notion that "the proposed CIP does not tie closely enough without additional education and training to high-demand occupations." This is evident by MERIC data that shows multiple (at least 12) occupations have high demand and only require a Bachelor's or Master's degree, both of which SEMO offers.</p>	
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Southeast Missouri State University	Engineering Technology/Technicians, General	15.00	SEMO offers a BS in Engineering Technology with options in Electrical and Automation Systems and Mechanical and Manufacturing Systems. Examples of career opportunities available to students that graduate with these degrees include, but are not limited to industrial electrician, electrical technician, process control engineer, product test engineer, PLC Programmer, electronics technician, engineering technician, instrumentation engineer, engineering technician, manufacturing engineer, production manager, and many others. MERIC's Missouri Occupational Projections 2020-2030 report gives a Career Grade of A or B+ to many corresponding occupations that require a Bachelor's degree such as Computer Hardware Engineers (B+), Electrical Engineers (B+), Electronics Engineer (B+), Industrial Engineers (A), Materials Engineer (B+), and Mechanical Engineers (B+). Of note, at least four (4) other four-year institutions have been approved for various engineering technology degrees – Missouri State University, Missouri Western State University, Missouri Southern State University, and Saint Louis University.	Associated occupations are identified as high career grade/high demand in Missouri.
Southeast Missouri State University	Chemistry	40.05	SEMO offers a BS in Forensic Chemistry. This degree prepares students for a career in toxicology, laboratories, or law enforcement as a chemist, scientist, or crime scene investigator. MERIC's Missouri Occupational Projections 2020-2030 report gives a Career Grade of B or better to occupations related to this field of study – Chemicals (B+). Of note, at least two (2) other four-year institutions have been approved for related areas of study Columbia	While the skillset here may be valuable, the degree area in and of itself is not high demand. Net change in

			College (Forensic Science) and Maryville University (Forensic Science).	employment is currently relatively small in absolute numbers.
Southeast Missouri State University	Economics	45.06	SEMO offers a BS in Financial Econometrics. Occupational categories related to a Financial Econometrics degree include Financial Specialists and Mathematical Science occupations. Examples of popular occupations within these categories include data analysts, statisticians, management analysts, market research analyst, financial engineer, risk manager, investment analyst/portfolio manager, as well as others. MERIC's Missouri Occupational Projections 2()2()-2()3() report gives a Career Grade of B or better to occupations related to this field of study – Financial Managers (A+); Financial Examiners (A); Personal Financial Advisors (13+); Securities, Commodities, and Financial Services Sales Agents (13+); Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists (B+), and Economists (B). Of note, there are 16 institutions that have approval for various finance related degrees, and others that have approval for similar areas of study such as, but not limited to, Central Methodist University (Business Banking and Finance), University of Missouri Columbia (Corporate Finance), and Park University (Business Economics). Incorporated by reference, SEMO would point to additional high	Associated occupations are not identified as high career grade/high demand in Missouri without additional education.

			demand need outlined in its initial program proposal for the BS in Financial Econometrics submitted to MDHEWD on May 19, 2023, which was approved via Routine Review by MDHEWD in June 2023, and accepted by the Coordinating Board on September 13, 2023.	
State Fair Community College	Allied Health and Medical Assisting Services	51.08	Employment of pharmacy technicians is projected to grow 6 percent from 2022 to 2032, faster than the average for all occupations. About 44,900 openings for pharmacy technicians are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire. Also supported by our two Regional workforce boards.	Already a Fast Track Eligible CIP.
State Fair Community College	Practical Nursing, Vocational Nursing and Nursing Assistants	51.39	Overall employment of nursing assistants and orderlies is projected to grow 4 percent from 2022 to 2032, about as fast as the average for all occupations. About 209,400 openings for nursing assistants and orderlies are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire. Also supported by our two regional workforce boards	Already a Fast Track Eligible CIP.

The Ultimate Cosmetology and Barber Academy	Cosmetology and Related Grooming Services	12.04	About 89,400 openings for barbers, hairstylists, and cosmetologists are projected each year, on average, over the decade. These state licensed trades are one of the fastest growing trades that exist. The salons, barbershops, styling salons and nail bars reached a revenue of over \$5 billion in 2021, the research shows that by 2027 the hair care service industry alone is projected to reach over \$104.4 billion, these numbers show that the personal care industry is an industry that the American society sees value in investing in.	Associated occupations are identified as moderate demand in Missouri but low wage.
Moberly Area Community College	Homeland Security, Law Enforcement, Firefighting and Related Protective Services, Other	43.99	We would like the Emergency Telecommunicator program to be considered for Fast Track. It is another avenue where people in our region would be able to earn a decent wage with a potential for benefits in our region in just a few weeks of training. The Boone County Joint Communications as well as individual police and emergency services within our service region are regularly looking for employees for their emergency telecommunicator positions.	The MDHEWD has generally not approved General/Other CIPs for Fast Track eligibility. A number of protective services CIPs are approved for funding.