

















Career Clusters and Pathways

Career Cluster	Career Pathway	Career Cluster	Career Pathway	Career Cluster	Career Pathway
 Agriculture, Food & Natural Resources	<ul style="list-style-type: none"> • Agribusiness Systems • Animal Systems • Environmental Service Systems • Food Products & Processing Systems • Natural Resources Systems • Plant Systems • Power, Structural & Technical Systems 	 Government & Public Administration	<ul style="list-style-type: none"> • Foreign Service • Governance • National Security • Planning • Public Management & Administration • Regulation • Revenue & Taxation 	 Law, Public Safety, Corrections & Security	<ul style="list-style-type: none"> • Correction Services • Emergency & Fire Management Services • Law Enforcement Services • Legal Services • Security & Protective Services
 Architecture & Construction	<ul style="list-style-type: none"> • Construction • Design/Pre-Construction • Maintenance/Operations 	 Health Science	<ul style="list-style-type: none"> • Biotechnology Research & Development • Diagnostic Services • Health Informatics • Support Services • Therapeutic Services 	 Manufacturing	<ul style="list-style-type: none"> • Health, Safety & Environmental Assurance • Logistics & Inventory Control • Maintenance, Installation & Repair • Manufacturing Production Process Development • Production • Quality Assurance
 Arts, A/V Technology & Communications	<ul style="list-style-type: none"> • A/V Technology & Film • Journalism & Broadcasting • Performing Arts • Printing Technology • Telecommunications • Visual Arts 	 Hospitality & Tourism	<ul style="list-style-type: none"> • Lodging • Recreation, Amusements & Attractions • Restaurants & Food/Beverage Services • Travel & Tourism 	 Marketing	<ul style="list-style-type: none"> • Marketing Communications • Marketing Management • Marketing Research • Merchandising • Professional Sales
 Business, Management & Administration	<ul style="list-style-type: none"> • Administrative Support • Business Information Management • General Management • Human Resources Management • Operations Management 	 Human Services	<ul style="list-style-type: none"> • Consumer Services • Counseling & Mental Health Services • Early Childhood Development & Services • Family & Community Services • Personal Care Services 	 Science, Technology, Engineering & Mathematics	<ul style="list-style-type: none"> • Engineering & Technology • Science & Mathematics
 Education & Training	<ul style="list-style-type: none"> • Administration & Administrative Support • Professional Support Services • Teaching/Training 	 Information Technology	<ul style="list-style-type: none"> • Information Support & Services • Network Systems • Programming & Software Development • Web & Digital Communications 	 Transportation, Distribution & Logistics	<ul style="list-style-type: none"> • Facility & Mobile Equipment Maintenance • Health, Safety & Environmental Management • Logistics Planning & Management Services • Sales & Service • Transportation Operations • Transportation Systems/Infrastructure Planning, Management & Regulation • Warehousing & Distribution Center Operations
 Finance	<ul style="list-style-type: none"> • Accounting • Banking Services • Business Finance • Insurance • Securities & Investments 				



Health Science

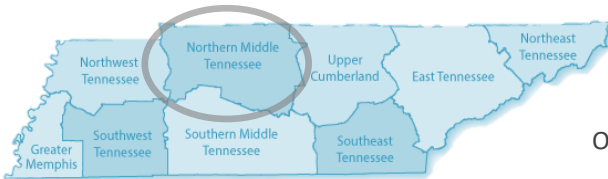
National Career Clusters Pathway ♦ Therapeutic Services



Regional Career Opportunities – Listed by Highest Projected Demand



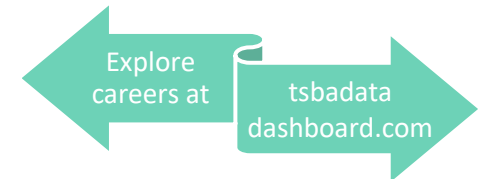
<p><i>Few regional occupations in this pathway require education at this degree level.</i></p> <p>Data Source TSBA District Data Dashboard</p>	<p>Nursing Aides, Orderlies & Attendants Annual Openings = 1012 Median Wage = \$26,097</p>	<p>Registered Nurses Annual Openings = 1273 Median Wage = \$61,762</p>	<p>A bachelor's degree may be needed for some registered nursing positions in this region.</p>	<p>Nurse Practitioners Annual Openings = 125 Median Wage = \$90,564</p>
	<p>Home Health Aides Annual Openings = 243 Median Wage = \$22,203</p>	<p>Medical Assistants Annual Openings = 494 Median Wage = \$32,100</p>	<p><i>Few regional occupations in this pathway require education at this degree level.</i></p>	<p>Pharmacists Annual Openings = 116 Median Wage = \$121,838</p>
	<p>Physical Therapist Aides Annual Openings = 129 Median Wage = \$26,679</p>	<p>Licensed Practical & Licensed Vocational Nurses Annual Openings = 490 Median Wage = \$41,029</p>		<p>Physical Therapists Annual Openings = 87 Median Wage = \$81,380</p>
	<p>Psychiatric Aides Annual Openings = 67 Median Wage = \$19,670*</p>	<p>Pharmacy Technicians Annual Openings = 313 Median Wage = \$30,210</p>		<p>Nurse Anesthetists Annual Openings = 55 Median Wage = \$146,553</p>
	<p>Dietic Technicians Annual Openings = 12 Median Wage = \$27,463</p>	<p>Dental Assistants Annual Openings = 275 Median Wage = \$36,671</p>		<p>Physician Assistants Annual Openings = 49 Median Wage = \$85,518</p>



★ Top five high-value occupations in this pathway for the Northern Middle Tennessee Region

Occupations with the highest annual openings that are stable or growing with median wages above \$35,000 are considered high-value.

* = state level data was used due to limitations in regional data.





Health Science

National Career Clusters Pathway ♦ Therapeutic Services



Regional High School Requirements and Programs (Grades 9-12)

English Language Arts	Math	Science	Social Studies	Foreign Language	Physical Education	Fine Arts	Elective Focus
English I	Integrated I	Biology	World History and Geography	Foreign Language I	Lifetime Wellness	Fine Arts Selection	Minimum of Three Courses See career programs and electives below.
English II	Integrated II	Chemistry	U.S. History and Geography	Foreign Language II	Physical Education (.5)	-----	
English III	Integrated III	Physics	Economics / Government	-----	-----	-----	One Additional Elective is Required
English IV	Upper Level Math	-----	Personal Finance (.5)	-----	-----	-----	

Career Programs	Career Program Courses	Additional Electives	Regional Postsecondary Schools	
<input type="checkbox"/> Nursing Services <input type="checkbox"/> Therapeutic Services <input type="checkbox"/> Sport and Human Performance <input type="checkbox"/> Emergency Services (Alternate Career Cluster: Law, Public Safety, Corrections & Security) <i>See other Health Science pathways for additional career programs and opportunities.</i> <i>*Note: Programs and courses may vary by high school.</i>	<input type="checkbox"/> Career Exploration <input type="checkbox"/> Health Science Education <input type="checkbox"/> Anatomy & Physiology <input type="checkbox"/> Medical Therapeutics <input type="checkbox"/> Nursing Education <input type="checkbox"/> Dental Science <input type="checkbox"/> Nutrition Science <input type="checkbox"/> Pharmacological Science <input type="checkbox"/> Rehabilitation Careers <input type="checkbox"/> Exercise Science <input type="checkbox"/> Emergency Medical Services <input type="checkbox"/> Medical Terminology <input type="checkbox"/> Work-Based Learning / Practicum	English Language Arts <input type="checkbox"/> _____ <input type="checkbox"/> _____ Math <input type="checkbox"/> _____ <input type="checkbox"/> _____ Science <input type="checkbox"/> _____ <input type="checkbox"/> _____ Other <input type="checkbox"/> _____ <input type="checkbox"/> _____	Certificates and Associate's Degrees	Bachelor's and Advanced Degrees
			Community Colleges <ul style="list-style-type: none"> Motlow State Community College Tennessee College of Applied Technology Nashville State Community College 	Colleges and Universities <ul style="list-style-type: none"> Middle Tennessee State University Tennessee State University University of Tennessee Vanderbilt University

Postsecondary Programs/Majors for Occupations in this Pathway

	Registered Nursing	Medical/Clinical Assistant	Practical Nursing, Vocational Nursing	Pharmacy Technician	Dental Assisting
Certificate or AA					
Bachelor's Degree		***	***	***	***
Advanced Degree	Nurse Practitioner	Pharmacy	Physical Therapy	Nurse Anesthetist	Physician Assistant

*** Few regional occupations in this pathway require education at this degree level.



Health Science

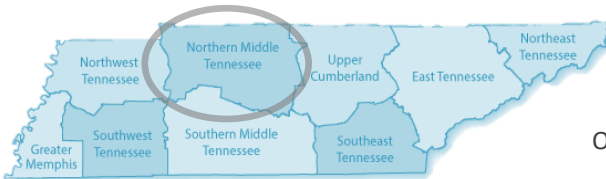
National Career Clusters Pathways ♦ Health Informatics ♦ Diagnostic Services ♦ Support Services ♦ Biotechnology Research & Development



Regional Career Opportunities – Listed by Highest Projected Demand



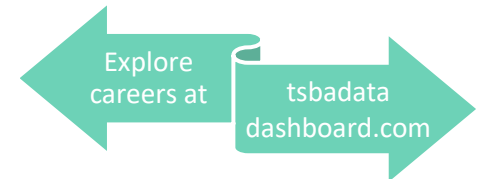
Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorate Degree
<i>Few regional occupations in these pathways require education at this degree level.</i>	Pharmacy Aides Annual Openings = 84 Median Wage = \$22,119	Medical Secretaries Annual Openings = 287 Median Wage = \$33,791	<i>Few regional occupations in these pathways require education at this degree level.</i>	Medical & Health Service Managers Annual Openings = 338 Median Wage = \$93,798 ★
	Medical Equipment Preparers Annual Openings = 39 Median Wage = \$33,024	Medical and Clinical Laboratory Technicians Annual Openings = 180 Median Wage = no data		Medical Scientists Annual Openings = 67 Median Wage = \$71,985 ★
	Orderlies Annual Openings = 25 Median Wage = \$25,541	Medical Records & Health Information Technicians Annual Openings = 97 Median Wage = \$45,174 ★		<i>Few regional occupations in these pathways require education at this degree level.</i>
	<i>Few regional occupations in these pathways require education at this degree level.</i>	Radiologic Technologists & Technicians Annual Openings = 66 Median Wage = \$52,384 ★		
Data Source TSBA District Data Dashboard 		Diagnostic Medical Sonographers Annual Openings = 24 Median Wage = \$66,341 ★		



★ Top five high-value occupations in these pathways for the **Northern Middle Tennessee Region**

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* = state level data was used due to limitations in regional data.





Health Science

National Career Clusters Pathways ♦ Health Informatics ♦ Diagnostic Services ♦ Support Services ♦ Biotechnology Research & Development



Regional High School Requirements and Programs (Grades 9-12)

English Language Arts	Math	Science	Social Studies	Foreign Language	Physical Education	Fine Arts	Elective Focus
English I	Integrated I	Biology	World History and Geography	Foreign Language I	Lifetime Wellness	Fine Arts Selection	Minimum of Three Courses See career programs and electives below.
English II	Integrated II	Chemistry	U.S. History and Geography	Foreign Language II	Physical Education (.5)	-----	
English III	Integrated III	Physics	Economics / Government	-----	-----	-----	One Additional Elective is Required
English IV	Upper Level Math	-----	Personal Finance (.5)	-----	-----	-----	

Career Programs	Career Program Courses	Additional Electives	Regional Postsecondary Schools	
<input type="checkbox"/> Diagnostic Services <i>See other Health Science pathways for additional career programs and opportunities.</i> <i>*Note: Programs and courses may vary by high school.</i>	<input type="checkbox"/> Career Exploration <input type="checkbox"/> Health Science Education <input type="checkbox"/> Anatomy & Physiology <input type="checkbox"/> Diagnostic Medicine <input type="checkbox"/> Medical Terminology <input type="checkbox"/> Work-Based Learning / Practicum	English Language Arts <input type="checkbox"/> _____ <input type="checkbox"/> _____ Math <input type="checkbox"/> _____ <input type="checkbox"/> _____ Science <input type="checkbox"/> _____ <input type="checkbox"/> _____ Other <input type="checkbox"/> _____ <input type="checkbox"/> _____	Certificates and Associate's Degrees Community Colleges <ul style="list-style-type: none"> Motlow State Community College Tennessee College of Applied Technology Nashville State Community College 	Bachelor's and Advanced Degrees Colleges and Universities <ul style="list-style-type: none"> Middle Tennessee State University Tennessee State University University of Tennessee Vanderbilt University

Postsecondary Programs/Majors for Occupations in these Pathways

	Medical Administrative / Executive Assistant	Clinical/Medical Laboratory Assistant	Health Information / Medical Records Technology	Radiologic Technology	Diagnostic Medical Sonography
Certificate or AA					
Bachelor's Degree	***	***	***	***	***
Advanced Degree	Health / Health Care Administration	Medical Science	***	***	***

*** Few regional occupations in these pathways require education at this degree level.