

Career Pathway Plan of Study: Information Technology

Building Linkages in IT Occupations Framework: For Entry Level, Technical, and Professional Careers Related to the Design, Development, Support and Management of Hardware, Software, Multimedia, and Systems Integration Services.

GRADE 9-12 SCOPE AND SEQUENCE PROGRESSION OF LEARNING

TIER 1		TIER 2		TIER 3	
Careers that you can enter with a high school diploma and relevant coursework.		Careers that require some formal training or education beyond high school. Examples would include community college, trade school, technical school, etc.		Careers that frequently require a four-year degree or more.	
Examples of Tier 1 Careers: Computer Numerically Controlled (CNC) Machine Tool Programmer, Computer Operator		Examples of Tier 2 Careers: Computer Network Support Specialist, Computer User Support Specialist, Telecommunications Engineering Specialist, Web Developer		Examples of Tier 3 Careers: Application Software Developer, Architectural and Engineering Manager, Business Intelligence Analyst, College Computer Science Teacher, Computer Hardware Engineer, Computer Network Architect, Computer Programmer, Computer and Information Research Scientist, Computer and Information Scientist, Computer and Information Systems Manager, Computer Support Specialist, Computer Systems Analyst, Computer Systems Engineers/Architect, Data Warehousing Specialist, Database Architect, Database Administrator, Document Management Specialist, Graphic Designer, Informatics Nurse Specialist, Information Security Analyst, Information Technology Project Manager, Multimedia Artist/Animator, Network/Computer Systems Administrator, Search Marketing Strategist, Software Developer (Applications/Systems Software), Software Quality Assurance Engineer, Technical Writer, Video Game Designer, Web Administrator	
*For complete job descriptions and requirements, please visit O*NET Online (U.S. Department of Labor)					
TIER 1 FOUR-YEAR PLAN		TIER 2 FOUR-YEAR PLAN		TIER 3 FOUR-YEAR PLAN	
9 th Grade Core Classes	10 th Grade Core Classes	9 th Grade Core Classes	10 th Grade Core Classes	9 th Grade Core Classes	10 th Grade Core Classes
English 1	English 2	English 1	English 2	English 1	English 2
Freshman Writing	Math	Freshman Writing	Math	Freshman Writing	Math
Math	Biology	Math	Biology	Math	Biology
Physical Science	Civics (1/2 credit)	Physical Science	Civics (1/2 credit)	Physical Science	Civics (1/2 credit)
World Studies	Economics (1/2 credit)	World Studies	Economics (1/2 credit)	World Studies	Economics (1/2 credit)
Sport Education (1/2 credit)	Fit for Life or Personal Fitness (1/2 credit)	Sport Education (1/2 credit)	Fit for Life or Personal Fitness (1/2 credit)	Sport Education (1/2 credit)	Fit for Life or Personal Fitness (1/2 credit)
Art or ICT (½ credit)	Health 1 (1/2 credit)	Art or ICT (½ credit)	Health 1 (1/2 credit)	Art or ICT (½ credit)	Health 1 (1/2 credit)
	Art or ICT (½ credit)		Art or ICT (½ credit)	World Language	Art or ICT (½ credit)
					World Language
11 th Grade Core Classes	12 th Grade Core Classes	11 th Grade Core Classes	12 th Grade Core Classes	11 th Grade Core Classes	12 th Grade Core Classes

English 3	English 4 (or English Elective)	English 3	English 4 (or English Elective)	English 3	English 4 (or English Elective)
Math	Math Experience	Math	Math	Math	Math
US History		US History	Physics or Chemistry	US History	World Language
		Physics or Chemistry		World Language	Physics or Chemistry
				Physics or Chemistry	
TIER 1 CAREER PATHWAY PLAN OF STUDY ELECTIVES		TIER 2 CAREER PATHWAY PLAN OF STUDY ELECTIVES		TIER 3 CAREER PATHWAY PLAN OF STUDY ELECTIVES	
*Computer Integrated Manufacturing (U) (H) *Computer Networking 1 & 2 (U) (H) Discovering Computer Science (U) Software Applications		Advanced Computer Science Topics (E) (H) *Computer Networking 1 & 2 (U) (H) Discovering Computer Science (U) Desktop Publishing (U) (H) Software Applications		AP Computer Science Advanced Computer Science Topics (E) (H) *Computer Networking 1 & 2 (H) *Design & Visual Communications 1 & 2 (H) Discovering Computer Science (U) Graphic Design 1 & 2 Software Applications Video Game Programming	

*=CTE Program with Nashua Technology Center

Levels: U-Unleveled, F-Foundations, E-Extensions, H-Honors