NEW HAMPSHIRE CAREER PLANNING GUIDE 2020-2030

NEW HAMPSHIRE CAREER PLANNING GUIDE 2020-2030																	
Science, Technology, Engineering, and	N	Н Оссир	ationa	Projection	s		2021 Wage				e		a)	Н	ollar	nd	
Mathematics (STEM) Cluster	Emplo	yment	Avg.	Annual Ope	nings	Future	Entry Level	Usual Er	ntry-Level Pr	eparation	entic	Military	cens	Int	teres	sts	Career Pathways
Occupation, SOC Code, and Description	2020	2030	Exits	Transfers	Total	Outlook	Median	Education	Experience	Training	Apprentice	Σ	NH License	1 st	2 nd	3 rd	Career Fattiways
Aerospace Engineers (17-2011): Perform a variety of engineering work in																	
designing, constructing, and testing aircraft, missiles, and spacecraft. May conduct basic and applied research to evaluate adaptability of materials and						T	\$42.94	Bachelor's	Name	Nama	*	*	*		_		Engineering and
equipment to aircraft design and manufacture.	n	n	n	n	n	_	\$50.93	degree	None	None	_	_	_		R		Technology
equipment to an orare design and manadetate.																	
Anthropologists and Archeologists (19-3091): Study the origin, development,																	
and behavior of human beings. May engage in systematic recovery and	36	40	1	2	3	N N	\$22.68	Master's degree	None	None					Α	R	Science and
examination of material evidence, such as tools or pottery remaining from past	30	40	_	2	3	_	\$24.15	iviastei s degree	None	None				'	^	IX.	Mathematics
human culture.																	
Architectural and Engineering Managers (11-9041): Plan, direct, or coordinate		4.550					\$53.55	Bachelor's	5 years or					_			Engineering and
activities in such fields as architecture and engineering or research and development in these fields.	1,461	1,569	27	77	115	不	\$78.43	degree	more	None		*		Е	R	ı	Technology
Atmospheric and Space Scientists (19-2021): Investigate atmospheric																	
phenomena and interpret meteorological data gathered by surface and air							\$16.41	Bachelor's									Science and
stations, satellites, and radar to prepare reports and forecasts. Includes	64	76	1	5	7	7	\$18.75	degree	None	None	*	*		I	R		Mathematics
weather forecasters.																	
Biochemists and Biophysicists (19-1021): Study the chemical composition and																	
physical principles of living cells and organisms, their electrical and mechanical							\$30.74	Doctoral or				١.					Science and
energy, and related phenomena. Conduct research on metabolism,	89	99	2	7	10	7	\$46.92	professional	None	None		*		I	Α	R	Mathematics
reproduction, growth, and heredity, or the effects of foods, drugs, or serums.								degree									
Bioengineers and Biomedical Engineers (17-2031): Apply knowledge of																	
engineering, biology, and biomechanical principles to the design, development,																	
and evaluation of biological and health systems and products, such as artificial	n	n	n	n	n	Ψ.	\$56.82	Bachelor's	None	None		*	*	1	R		Engineering and
organs, prostheses, instrumentation, and medical information systems.							\$62.05	degree									Technology
Biological Scientists, All Other (19-1029): All biological scientists not listed	444	454	_	40	42		\$21.35	Bachelor's						١. ا			Science and
separately. Includes Bioinformatics Scientists, Molecular and Cellular Biologists, and Geneticists.	141	154	2	10	13	7	\$37.89	degree	None	None		*		ı	R		Mathematics
Cartographers and Photogrammetrists (17-1021): Collect, analyze, and																	
interpret geographic information from geodetic surveys, aerial photographs,						_	\$19.75	Bachelor's									Science and
and satellite data. Research, study, and prepare maps and spatial data in digital	113	128	4	6	12	7	\$28.90	degree	None	None	*	*		R	ı	С	Mathematics
or graphic form. May work with GIS software.																	
Chemical Engineers (17-2041): Design chemical plant equipment and devise																	
manufacturing processes for chemicals and products, such as gasoline,							\$29.99	Bachelor's					١.				Engineering and
synthetic rubber, plastics, detergents, cement, paper, and pulp, applying	98	102	2	4	6	Ä	\$37.74	degree	None	None		*	*	I	R		Technology
principles and technology of chemistry, physics, and engineering.																	
Chemists (19-2031): Conduct qualitative and quantitative chemical analyses or							40.5										
experiments in laboratories for quality or process control or to develop new	256	306	4	21	30	^	\$26.99	Bachelor's	None	None		*		1	R	С	Science and
products or knowledge.							\$48.83	degree									Mathematics
Computer and Information Research Scientists (15-1221): Conduct research																	
into fundamental computer and information science as theorists, designers, or	61	77	1	4	7	7	\$43.62	Master's degree	None	None		*		1	R	С	Science and
inventors. Develop solutions to problems in the field of computer hardware and							\$53.35			-							Mathematics
software.	<u> </u>	<u> </u>	<u> </u>			L		L					<u> </u>				

NEW HAMPSHIRE CAREER PLANNING GUIDE 2020-2030

Calaman Tankan lang Funian alaman language		AININING	GUIDE 2020	2030												
Science, Technology, Engineering, and	N	H Occup	ationa _I	l Projection	IS		2021 Wage				ice	.>	ıse	Нс	lland	
Mathematics (STEM) Cluster	Emplo	yment	Avg.	Annual Ope	enings	Future	Entry Level	Usual En	try-Level Pr	eparation	Apprentice	Military	NH License	Int	erests	Career Pathways
Occupation, SOC Code, and Description	2020	2030	Exits	Transfers	Total	Outlook	Median	Education	Experience	Training	Арк	Σ	Z	1 st	2 nd 3 ^r	d
Computer Hardware Engineers (17-2061): Research, design, develop, or test computer or computer-related equipment for commercial, industrial, military, or scientific use. May supervise the manufacturing and installation of computer or computer-related equipment and components.	194	204	4	9	14	R	\$39.94 \$62.15	Bachelor's degree	None	None		*	*	1	R C	Engineering and Technology
Conservation Scientists (19-1031): Manage, improve, and protect natural resources to maximize use without damaging the environment. May conduct soil surveys and develop plans to eliminate soil erosion or protect rangelands. May identify best ways to conserve soil and water.	89	96	2	7	10	'n	\$25.12 \$35.64	Bachelor's degree	None	None	*			R	I E	Science and Mathematics
Data Scientists and Mathematical Science Occupations, All Other (15-2098): All other mathematical science occupations not listed separately. Includes Data Scientists and Bioinformatics Technicians.	140	184	3	8	15	71	n/a n/a	Bachelor's degree	None	None	*	*		С	I E	Science and Mathematics
Economists (19-3011): Conduct research, prepare reports, or formulate plans to address economic problems related to the production and distribution of goods and services or monetary and fiscal policy. May collect and process economic or statistical data using sampling or econometric methods.	n	n	n	n	n	•	\$31.66 \$68.94	Master's degree	None	None				1	CE	Science and Mathematics
Electrical Engineers (17-2071): Research, design, develop, test, or supervise the manufacturing and installation of electrical equipment, components, or systems for commercial, industrial, military, or scientific use.	1,802	2,028	46	77	146	^	\$37.52 \$52.14	Bachelor's degree	None	None		*	*	I	R	Engineering and Technology
Electronics Engineers, Except Computer (17-2072): Research, design, develop, or test electronic components and systems for commercial, industrial, military, or scientific use, employing knowledge of electronic theory and materials properties. Design electronic circuits and components.	380	432	10	16	31	↑	\$36.49 \$47.76	Bachelor's degree	None	None		*	*	1	R	Engineering and Technology
Engineers, All Other (17-2199): All engineers not listed separately. Includes Biochemical, Validation, Energy, Manufacturing, Mechatronics, Microsystems, Photonics, Robotics, Nanosystems, Wind Energy, and Solar Energy Systems Engineers.	334	344	7	14	22	n	\$29.84 \$44.24	Bachelor's degree	None	None		*	*	I	R	Engineering and Technology
Environmental Scientists and Specialists, Including Health (19-2041): Conduct research or perform investigations for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect either the environment or the health of the population.	375	404	6	31	40	↑	\$25.08 \$35.36	Bachelor's degree	None	None	*	*		I	R C	Science and Mathematics
Geographers (19-3092): Study the nature and use of areas of the Earth's surface, relating and interpreting interactions of physical and cultural phenomena. Conduct research on physical aspects of a region, including land forms, climate, soils, plants, and animals, and spatial implications of human activities in an area, as well as interdependence between regions.	n	n	n	n	n	•	n/a n/a	Bachelor's degree	None	None				1	R A	Science and Mathematics
Geoscientists, Except Hydrologists and Geographers (19-2042): Study the composition, structure, and other physical aspects of the Earth. May use geological, physics, and math knowledge to explore for oil, gas, minerals, or water. May study the earth's internal composition, atmospheres, and oceans.	131	142	2	11	14	y	\$28.75 \$34.72	Bachelor's degree	None	None		*	*	ı	R	Science and Mathematics

NEW HAMPSHIRE CAREER PLANNING GUIDE 2020-2030 Science, Technology, Engineering, and NH Occupational Projections 2021 Wage Holland																
Science, Technology, Engineering, and	N	Н Оссир	ationa	l Projection	IS		2021 Wage				e		e e	Н	olland	
Mathematics (STEM) Cluster	Emplo	yment	Avg.	Annual Ope	enings	Future	Entry Level	Usual En	try-Level Pr	eparation	entic	Military	cens	Int	erests	Career Pathways
Occupation, SOC Code, and Description	2020	2030	Exits	Transfers	Total	Outlook	Median	Education	Experience	Training	Apprentice	Mii	NH License	1 st	2 nd 3	
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors (17-2111): Promote worksite or product safety by applying knowledge of industrial processes, mechanics, chemistry, psychology, and industrial health and safety laws. Includes industrial product safety engineers.	52	56	1	2	3	'n	\$36.66 \$61.11	Bachelor's degree	None	None		*	*	I	R (Engineering and Technology
Historians (19-3093): Research, analyze, record, and interpret the past as recorded in sources such as government and institutional records, newspapers and other periodicals, photographs, interviews, films, electronic media, and unpublished manuscripts, such as personal diaries and letters.	n	n	n	n	n	•	n/a n/a	Master's degree	None	None	*	*		ı		Science and Mathematics
Hydrologists (19-2043): Research the distribution, circulation, and physical properties of underground and surface waters; and study the form and intensity of precipitation, its rate of infiltration into the soil, movement through the earth, and its return to the ocean and atmosphere.	100	113	2	8	11	7	\$31.89 \$42.51	Bachelor's degree	None	None		*		ı	R	Science and Mathematics
Industrial Engineers (17-2112): Design, develop, test, and evaluate integrated systems for managing industrial production processes, including human work factors, quality control, inventory control, logistics and material flow, cost analysis, and production coordination.	1,887	2,206	45	82	159	^	\$33.53 \$46.83	Bachelor's degree	None	None	*	*	*	ı	C E	Engineering and Technology
Life, Physical, and Social Science Technicians, All Other (19-4099): All life, physical, and social science technicians not listed separately. Includes Quality Control Analysts; Precision Agriculture Technicians; and Remote Sensing Technicians.	106	123	3	11	16	71	\$18.05	Associate's degree	None	None	*	*		1	R	Science and Mathematics
Marine Engineers and Naval Architects (17-2121): Design, develop, and evaluate the operation of marine vessels, ship machinery, and related equipment, such as power supply and propulsion systems.	n	n	n	n	n	n	n/a n/a	Bachelor's degree	None	None		*	*	ı	R	Engineering and Technology
Materials Engineers (17-2131): Evaluate materials and develop machinery and processes to manufacture materials for use in products that must meet specialized design and performance specifications. Develop new uses for known materials.	71	76	2	3	5	n	\$38.75 \$46.10	Bachelor's degree	None	None	*	*	*	ı	R E	Engineering and Technology
Materials Scientists (19-2032): Research and study the structures and chemical properties of natural and synthetic or composite materials such as metals, alloys, rubber, ceramics, semiconductors, polymers, and glass. Determine ways to strengthen or combine materials or develop new materials.	123	134	2	10	13	¥	\$45.66 \$80.31	Bachelor's degree	None	None				1	R	Science and Mathematics
Mathematicians (15-2021): Conduct research in fundamental mathematics or in application of mathematical techniques to science, management, and other fields. Solve problems in various fields using mathematical methods.	23	24	0	1	1	n	n/a n/a	Master's degree	None	None				ı	C A	Science and Mathematics
Mechanical Engineers (17-2141): Perform engineering duties in planning and designing tools, engines, machines, and other mechanically functioning equipment. Oversee installation, operation, maintenance, and repair of equipment such as centralized heat, gas, water, and steam systems.	2,532	2,756	45	109	176	↑	\$33.49 \$46.83	Bachelor's degree	None	None	*	*	*	ı	R (Engineering and Technology
Medical Scientists, Except Epidemiologists (19-1042): Conduct research dealing with the understanding of human diseases and the improvement of human health. Engage in clinical investigation, research and development, or other related activities.	270	315	4	17	25	7	\$32.34	Doctoral or professional degree	None	None		*		ı	R A	Science and Mathematics

Economic and Labor Market Information Bureau New Hampshire Employment Security

NEW HAMPSHIRE CAREER PLANNING GUIDE 2020-2030																
Science, Technology, Engineering, and	N	Н Оссир	ationa	l Projection	s		2021 Wage				e		ė	Нс	llan	d l
Mathematics (STEM) Cluster	Emplo	yment	Avg.	Annual Ope	nings	Future	Entry Level	Usual En	try-Level Pr	eparation	entic	Military	icens	Int	eres	Career Pathways
Occupation, SOC Code, and Description	2020	2030	Exits	Transfers	Total	Outlook	Median	Education	Experience	Training	Apprentice	Ξ	NH License	1 st	2 nd	
											,					
Microbiologists (19-1022): Investigate the growth, structure, development, and																
other characteristics of microscopic organisms such as bacteria, algae, or fungi.	4.00	4.50				•	\$25.59	Bachelor's							_	Science and
Includes medical microbiologists who study the relationship between organisms and disease or the effects of antibiotics on microorganisms.	160	168	3	12	16	7	\$31.01	degree	None	None		*		1	R	Mathematics
organisms and disease of the effects of antibiotics of microofganisms.																
Mining and Geological Engineers, Including Mining Safety Engineers (17-2151):																
Conduct sub-surface surveys to identify characteristics of potential land or							,									L
mining development sites. May inspect for unsafe conditions or specify	n	n	n	n	n	u	n/a	Bachelor's	None	None	*		*	1	R	E Engineering and
equipment for safe, economical, and environmentally sound extraction.							n/a	degree								Technology
Nuclear Engineers (17-2161): Conduct research on nuclear engineering projects							4									
or apply principles and theory of nuclear science to problems concerned with release, control, and use of nuclear energy and nuclear waste disposal.	n	n	n	n	n	lack	\$47.57	Bachelor's	None	None		*	*	1	R	C Engineering and Technology
release, control, and use of nuclear energy and nuclear waste disposal.							\$61.55	degree								rechnology
Physical Scientists, All Other (19-2099): All physical scientists not listed							n/a	Bachelor's								Science and
separately. Includes Remote Sensing Scientists and Technologists.	109	107	1	7	8	•	n/a	degree	None	None		*		1	R	Mathematics
Physicists (19-2012): Conduct research into physical phenomena, develop							\$33.32	Doctoral or								Science and
theories on the basis of observation and experiments, and devise methods to	95	103	2	5	8	7	\$50.00	professional	None	None		*		1	R	Mathematics
apply physical laws and theories.							750.00	degree								Widthernaties
Political Scientists (19-3094): Study the origin, development, and operation of																
political systems. May study topics, such as public opinion, political decision- making, and ideology. May analyze the structure and operation of governments							620.54									
or various political entities. May conduct public opinion surveys, or analyze	77	87	2	5	8	7	\$28.51	Master's degree	None	None		*		1	Α	S Science and Mathematics
election results or public documents.							Ç39.02									Mathematics
Social Science Research Assistants (19-4061): Assist social scientists in																
laboratory, survey, and other social science research. May help prepare findings	49	53	1	5	6	u	n/a	Bachelor's	None	None				С		Science and
for publication and assist in laboratory analysis, quality control, or data	.5		_		Ů	_	n/a	degree	110.10							Mathematics
management. Social Scientists and Related Workers, All Other (19-3099): All social scientists																
and related workers not listed separately. Includes Transportation Planners.	118	121	3	8	11	u	\$27.90	Bachelor's	None	None		*		П	Α	Science and
und related workers not instead separately. Includes transportation relations	110	121			11	_	\$35.32	degree	None	None				1		Mathematics
Sociologists (19-3041): Study human society and social behavior by examining																
the groups and social institutions that people form, as well as various social,																
religious, political, and business organizations. May study the behavior and	n	n	n	n	n	u	n/a	Master's degree	None	None				٦l	Α	Science and
interaction of groups, trace their origin and growth, and analyze the influence	"		''			_	n/a	Widster 3 degree	None	None				'		Mathematics
of group activities on individual members.																
Statisticians (15-2041): Develop or apply mathematical or statistical theory and																
methods to collect, organize, interpret, and summarize numerical data to																
provide usable information. May specialize in fields such as bio-statistics,	75	105	2	4	9	7	\$30.99	Master's degree	None	None	*	*		С	ı	Science and
agricultural statistics, business statistics, or economic statistics.							\$37.53									Mathematics
Survey Researchers (19-3022): Plan, develop, or conduct surveys. May analyze																
and interpret the meaning of survey data, determine survey objectives, or						¥	n/a	NA	N	NI.						Science and
suggest or test question wording. Includes social scientists who primarily design questionnaires or supervise survey teams.	n	n	n	n	n	•	n/a	Master's degree	None	None					С	Mathematics
questionnumes of supervise survey teams.											Ì					
		l	l	I				I	I	<u> </u>	1					

Economic and Labor Market Information Bureau New Hampshire Employment Security