

NTO (Non-Traditional Occupations) refers to the underrepresented sex within the possible occupations under to the Instructional Area Classification code.

IAC	IAC Title	NTO	Cluster Code	Cluster Title
01.01	Agricultural Business and Management	F	1	Agriculture, Food and Natural Resource
01.02	Agricultural Mechanization	F	1	Agriculture, Food and Natural Resource
01.03	Agricultural Production Operations	F	1	Agriculture, Food and Natural Resource
01.04	Agricultural and Food Products Processing Management	F	1	Agriculture, Food and Natural Resource
01.05	Agricultural and Domestic Animal Services		1	Agriculture, Food and Natural Resource
01.06	Applied Horticulture/Horticultural Business Services	F	1	Agriculture, Food and Natural Resource
01.07	International Agriculture	F	1	Agriculture, Food and Natural Resource
01.08	Agricultural Public Services		1	Agriculture, Food and Natural Resource
01.09	Animal Sciences	F	1	Agriculture, Food and Natural Resource
01.10	Food Science and Technology	F	1	Agriculture, Food and Natural Resource
01.11	Plant Sciences, General	F	1	Agriculture, Food and Natural Resource
01.12	Soil Sciences	F	1	Agriculture, Food and Natural Resource
01.99	Agriculture, Agriculture Operations and Related Sciences, Other	F	1	Agriculture, Food and Natural Resource
03.01	Natural Resources Conservation and Research	F	1	Agriculture, Food and Natural Resource
03.02	Natural Resources Management and Policy	F	1	Agriculture, Food and Natural Resource
03.03	Fishing and Fisheries Sciences and Management	F	1	Agriculture, Food and Natural Resource
03.05	Forestry	F	1	Agriculture, Food and Natural Resource
03.06	Wildlife and Wildlands Science and Management	F	1	Agriculture, Food and Natural Resource
03.99	Natural Resources and Conservation, Other	F	1	Agriculture, Food and Natural Resource
04.02	Architecture	F	2	Architecture and Construction
04.04	Environmental Design	F	2	Architecture and Construction
04.05	Interior Architecture	F	5	Education and Training
04.06	Landscape Architecture	F	2	Architecture and Construction
04.09	Architectural Technology/Technician	F	2	Architecture and Construction
04.99	Architecture and Related Services, Other	F	2	Architecture and Construction
09.01	Communication and Media Studies		3	Arts, Audio/Video Technology and Communications
09.04	Journalism		3	Arts, Audio/Video Technology and Communications
09.07	Radio, Television, and Digital Communication	F	3	Arts, Audio/Video Technology and Communications
09.09	Public Relations, Advertising, and Applied Communication, Other		3	Arts, Audio/Video Technology and Communications
09.99	Communication, Journalism and Related Programs, Other		3	Arts, Audio/Video Technology and Communications
10.01	Communications Technology/Technician	F	3	Arts, Audio/Video Technology and Communications
10.02	Audiovisual Communications Technologies/Technician	F	3	Arts, Audio/Video Technology and Communications
10.03	Graphic Communications		3	Arts, Audio/Video Technology and Communications
11.01	Computer and Information Sciences, General	F	5	Education and Training
11.02	Computer Programming	F	5	Education and Training
11.03	Data Processing	F	11	Information Technology
11.04	Information Science/Studies	F	5	Education and Training
11.05	Computer Systems Analysis	F	5	Education and Training

IAC	IAC Title	NTO	Cluster Code	Cluster Title
11.06	Data Entry/Microcomputer Applications	M	4	Business, Management and Administration
11.07	Computer Science	F	5	Education and Training
11.08	Computer Software and Media Applications		3	Arts, Audio/Video Technology and Communications
11.09	Computer Systems Networking and Telecommunications	F	11	Information Technology
11.10	Computer/Information Technology Administration and Management	F	11	Information Technology
11.99	Computer and Information Sciences and Support Services, Other	F	11	Information Technology
12.04	Cosmetology and Related Personal Grooming Services	M	14	Marketing Sales and Service
12.05	Culinary Arts and Related Services	F	9	Hospitality and Tourism
12.99	Personal and Culinary Services, Other	F	9	Hospitality and Tourism
13.01	Education, General		5	Education and Training
13.15	Teaching Assistants/Aides	M	5	Education and Training
13.99	Education, Other		5	Education and Training
14.01	Engineering, General	F	5	Education and Training
14.02	Aerospace, Aeronautical and Astronautical Engineering	F	5	Education and Training
14.03	Agricultural/Biological Engineering and Bioengineering	F	5	Education and Training
14.04	Architectural Engineering	F	5	Education and Training
14.05	Biomedical/Medical Engineering	F	5	Education and Training
14.06	Ceramic Sciences and Engineering	F	5	Education and Training
14.07	Chemical Engineering	F	5	Education and Training
14.08	Civil Engineering	F	5	Education and Training
14.09	Computer Engineering, General	F	5	Education and Training
14.10	Electrical, Electronics and Communications Engineering	F	5	Education and Training
14.11	Engineering Mechanics	F	5	Education and Training
14.12	Engineering Physics	F	5	Education and Training
14.13	Engineering Science	F	5	Education and Training
14.14	Environmental/Environmental Health Engineering	F	1	Agriculture, Food and Natural Resource
14.18	Materials Engineering	F	2	Architecture and Construction
14.19	Mechanical Engineering	F	2	Architecture and Construction
14.20	Metallurgical Engineering	F	5	Education and Training
14.21	Mining and Mineral Engineering	F	1	Agriculture, Food and Natural Resource
14.22	Naval Architecture and Marine Engineering	F	5	Education and Training
14.23	Nuclear Engineering	F	5	Education and Training
14.24	Ocean Engineering	F	5	Education and Training
14.25	Petroleum Engineering	F	5	Education and Training
14.27	Systems Engineering	F	5	Education and Training
14.28	Textile Sciences and Engineering	F	5	Education and Training
14.31	Materials Science	F	5	Education and Training
14.32	Polymer/Plastics Engineering	F	5	Education and Training
14.33	Construction Engineering	F	2	Architecture and Construction
14.34	Forest Engineering	F	5	Education and Training

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14.35	Industrial Engineering	F	5	Education and Training
14.36	Manufacturing Engineering	F	2	Architecture and Construction
14.37	Operations Research		4	Business, Management and Administration
14.38	Surveying Engineering	F	5	Education and Training
14.39	Geological/Geophysical Engineering	F	5	Education and Training
14.99	Engineering, Other	F	5	Education and Training
15.01	Architectural Engineering Technology/Technicians	F	13	Manufacturing
15.02	Civil Engineering Technology/Technician	F	13	Manufacturing
15.03	Electrical and Electronic Engineering Technologies/Technicians	F	13	Manufacturing
15.04	Electromechanical and Instrumentation and Maintenance Technologies/Technicians	F	13	Manufacturing
15.05	Environmental Control Technologies/Technicians	F	2	Architecture and Construction
15.06	Industrial Production Technologies/Technicians	F	13	Manufacturing
15.07	Quality Control and Safety Technologies/Technicians		8	Health Science
15.08	Mechanical Engineering Related Technologies/Technicians	F	16	Transportation, Distribution, and Logistics
15.09	Mining and Petroleum Technologies/Technicians	F	1	Agriculture, Food and Natural Resource
15.10	Construction Engineering Technology/Technician	F	2	Architecture and Construction
15.11	Engineering-Related Technologies	F	2	Architecture and Construction
15.12	Computer Engineering Technologies/Technicians	F	13	Manufacturing
15.13	Drafting/Design Engineering Technologies/Technicians	F	2	Architecture and Construction
15.14	Nuclear Engineering Technology/Technician		15	Science, Technology, Engineering and Mathematics
15.15	Industrial Management	F	13	Manufacturing
15.99	Engineering Technologies/Technicians, Other	F	13	Manufacturing
19.01	Family and Consumer Sciences/Human Sciences, General		5	Education and Training
19.02	Family and Consumer Sciences/Human Sciences Business Services		5	Education and Training
19.04	Family and Consumer Economics and Related Services		5	Education and Training
19.05	Foods, Nutrition, and Related Services	M	8	Health Science
19.06	Housing and Human Environments		5	Education and Training
19.07	Human Development, Family Studies, and Related Services		5	Education and Training
19.09	Apparel and Textiles		5	Education and Training
19.99	Family and Consumer Sciences/Human Sciences, Other		5	Education and Training
22.03	Legal Support Services	M	4	Business, Management and Administration
22.99	Legal Professions and Studies, Other		10	Human Services
26.01	Biology, General		5	Education and Training
26.02	Biochemistry, Biophysics and Molecular Biology		5	Education and Training
26.03	Botany/Plant Biology		5	Education and Training
26.04	Cell/Cellular Biology and Anatomical Sciences		5	Education and Training
26.05	Microbiological Sciences and Immunology		5	Education and Training
26.07	Zoology/Animal Biology		1	Agriculture, Food and Natural Resource
26.08	Genetics		5	Education and Training

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26.09	Physiology, Pathology, and Related Sciences		5	Education and Training
26.10	Pharmacology and Toxicology		5	Education and Training
26.11	Biomathematics and Bioinformatics		5	Education and Training
26.12	Biotechnology		5	Education and Training
26.13	Ecology, Evolution and Population Biology		1	Agriculture, Food and Natural Resource
26.99	Biological and Biomedical Sciences, Other		5	Education and Training
30.08	Mathematics and Computer Science		15	Science, Technology, Engineering and Mathematics
30.16	Accounting and Computer Science		4	Business, Management and Administration
30.17	Behavioral Sciences		10	Human Services
30.18	Natural Sciences		15	Science, Technology, Engineering and Mathematics
30.19	Nutrition Sciences	M	5	Education and Training
31.01	Parks, Recreation and Leisure Studies		5	Education and Training
31.03	Parks, Recreation and Leisure Facilities Management		9	Hospitality and Tourism
31.05	Health and Physical Education/Fitness		5	Education and Training
31.99	Parks, Recreation, Leisure and Fitness Studies, Other		9	Hospitality and Tourism
40.02	Astronomy and Astrophysics	F	15	Science, Technology, Engineering and Mathematics
40.05	Chemistry	F	5	Education and Training
40.08	Physics	F	5	Education and Training
40.99	Physical Sciences, Other		15	Science, Technology, Engineering and Mathematics
41.01	Biology Technician/Biotechnology Laboratory Technician		15	Science, Technology, Engineering and Mathematics
41.02	Nuclear and Industrial Radiologic Technologies/Technicians		15	Science, Technology, Engineering and Mathematics
41.03	Physical Science Technologies/Technicians	F	15	Science, Technology, Engineering and Mathematics
41.99	Science Technologies/Technicians, Other		15	Science, Technology, Engineering and Mathematics
42.01	Psychology, General		5	Education and Training
43.01	Criminal Justice and Corrections	F	5	Education and Training
43.02	Fire Protection	F	12	Law, Public Safety, Corrections and Security
44.02	Community Organization and Advocacy	M	7	Government and Public Administration
44.04	Public Administration	F	4	Business, Management and Administration
44.05	Public Policy Analysis	F	4	Business, Management and Administration
44.07	Social Work	M	5	Education and Training
44.99	Public Administration and Social Service Professions, Other	F	4	Business, Management and Administration
45.04	Criminology		10	Human Services
45.05	Demography and Population Studies		10	Human Services
45.06	Economics		5	Education and Training
45.11	Sociology		5	Education and Training
45.12	Urban Studies/Affairs		10	Human Services
46.01	Mason/Masonry	F	2	Architecture and Construction
46.02	Carpenters	F	2	Architecture and Construction
46.03	Electrical and Power Transmission Installers	F	2	Architecture and Construction
46.04	Building/Construction Finishing, Management, and Inspection	F	2	Architecture and Construction

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46.05	Plumbing and Related Water Supply Services	F	2	Architecture and Construction
46.99	Construction Trades, Other	F	2	Architecture and Construction
47.01	Electrical / Electronic Maintenance and Repair Technology	F	13	Manufacturing
47.02	Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician (HAC, HACR, HVAC, HVACR)	F	2	Architecture and Construction
47.03	Heavy/Industrial Equipment Maintenance Technologies	F	2	Architecture and Construction
47.04	Precision Systems Maintenance and Repair Technologies	F	11	Information Technology
47.06	Vehicle Maintenance and Repair Technologies	F	13	Manufacturing
47.99	Mechanic and Repair Technologies/Technicians, Other	F	13	Manufacturing
48.05	Precision Metal Working	F	13	Manufacturing
48.07	Woodworking	F	13	Manufacturing
48.99	Precision Production, Other		3	Arts, Audio/Video Technology and Communications
49.01	Air Transportation	F	16	Transportation, Distribution, and Logistics
49.02	Ground Transportation	F	1	Agriculture, Food and Natural Resource
49.03	Marine Transportation	F	16	Transportation, Distribution, and Logistics
49.99	Transportation and Materials Moving, Other	F	16	Transportation, Distribution, and Logistics
50.04	Design and Applied Arts		3	Arts, Audio/Video Technology and Communications
50.06	Film/Video and Photographic Arts		3	Arts, Audio/Video Technology and Communications
50.07	Fine and Studio Art		3	Arts, Audio/Video Technology and Communications
50.09	Music		5	Education and Training
50.99	Visual and Performing Arts, Other		5	Education and Training
51.01	Chiropractic (DC)	F	5	Education and Training
51.02	Communication Disorders Sciences and Services	M	5	Education and Training
51.04	Dentistry (DDS, DMD)	F	5	Education and Training
51.05	Advanced/Graduate Dentistry and Oral Sciences	F	5	Education and Training
51.06	Dental Support Services and Allied Professions	M	5	Education and Training
51.07	Health and Medical Administrative Services		8	Health Science
51.08	Allied Health and Medical Assisting Services	M	8	Health Science
51.09	Allied Health Diagnostic, Intervention, and Treatment Professions		5	Education and Training
51.10	Clinical/Medical Laboratory Science and Allied Professions	M	5	Education and Training
51.11	Health/Medical Preparatory Programs		5	Education and Training
51.15	Mental and Social Health Services and Allied Professions	M	10	Human Services
51.18	Ophthalmic and Optometric Support Services and Allied Professions		8	Health Science
51.20	Pharmacy, Pharmaceutical Sciences, and Administration		5	Education and Training
51.22	Public Health		5	Education and Training
51.23	Rehabilitation and Therapeutic Professions		5	Education and Training
51.24	Veterinary Medicine (DVM)		5	Education and Training
51.25	Veterinary Biomedical and Clinical Sciences (Cert, MS, PhD)		5	Education and Training
51.26	Health Aides/Attendants/Orderlies	M	8	Health Science
51.27	Medical Illustration and Informatics		11	Information Technology

IAC	IAC Title	NTO	Cluster Code	Cluster Title
51.31	Dietetics and Clinical Nutrition Services	M	8	Health Science
51.38	Registered Nursing, Nursing Administration, Nursing Research and Clinical Nursing.	M	8	Health Science
51.39	Practical Nursing, Vocational Nursing and Nursing Assistants.	M	8	Health Science
52.02	Business Administration, Management and Operations	F	4	Business, Management and Administration
52.03	Accounting and Related Services		4	Business, Management and Administration
52.04	Business Operations Support and Assistant Services	M	4	Business, Management and Administration
52.06	Business/Managerial Economics		5	Education and Training
52.07	Entrepreneurial and Small Business Operations	F	4	Business, Management and Administration
52.08	Finance and Financial Management Services		4	Business, Management and Administration
52.09	Hospitality Administration/Management		9	Hospitality and Tourism
52.10	Human Resources Management and Services		4	Business, Management and Administration
52.11	International Business	F	4	Business, Management and Administration
52.12	Management Information Systems and Services		11	Information Technology
52.13	Management Sciences and Quantitative Methods		4	Business, Management and Administration
52.14	Marketing		5	Education and Training
52.16	Taxation		4	Business, Management and Administration
52.17	Insurance		5	Education and Training
52.18	General Sales, Merchandising and Related Marketing Operations		14	Marketing Sales and Service
52.19	Specialized Sales, Merchandising, and Related Marketing Operations		14	Marketing Sales and Service
52.99	Business, Management, Marketing, and Related Support Services		4	Business, Management and Administration