

**New Completers Needed at the Program-Level**

**Critical Fields in Economic Driver Industries --CIP Codes:**

Computer and Information Science				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*11.10*	Computer/Information Technology Administration and Management	196.18	182.28	249
*11.0701*	Computer Science	143.65	138.85	309
*11.02*	Computer Programming	18.29	17.80	42
*11.01*	Computer and Information Sciences, General	12.97	11.03	80
*11.0901*	Computer Systems Networking and Telecommunications	2.75	0.00	342
*11.99*	Computer and Information Science and Support Services, Other	2.67	2.23	17
*11.0401*	Information Sciences/Studies	0.59	0.2	140
*11.08*	Computer Software and Media Applications	0.20	0.14	20
Engineering				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*14.1401*	Environmental/Environmental Health Engineering	126.00	105.91	17
*14.0701*	Chemical Engineering	108.18	101.61	160
*14.2501*	Petroleum Engineering	93.14	87.18	138
*14.1901*	Mechanical Engineering	66.53	62.48	344
*14.0901*	Computer Engineering, General	54.09	53.68	38
*14.0801*	Civil Engineering, General	50.00	32.76	240
*14.10*	Electrical, Electronics and Communications Engineering	46.07	38.39	213
*14.2201*	Naval Architecture and Marine Engineering	43.53	42.67	22
*14.0101*	Engineering, General	32.42	18.83	175
*14.3501*	Industrial Engineering	8.89	5.17	48
Engineering Technology				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*15.0699*	Industrial Production Technologies/Technicians, Other	1,214.14	894.93	353
*15.0612*	Industrial Technology/Technician	457.06	342.38	240
*15.1102*	Surveying Technology/Surveying	240.10	239.64	22
*15.13*	Drafting/Design Engineering Technologies/Technicians	181.01	3.52	359
*15.0000*	Engineering Technology, General	161.86	137.03	170
*15.04*	Electromechanical Instrumentation and Maintenance Technologies/Technicians (excluding Biomedical Technology)	130.44	4.68	683
*15.0903*	Petroleum Technology/Technician	45.00	4.00	155
*15.1501*	Engineering/Industrial Management	19.88	0.40	35
*15.03*	Electrical Engineering Technologies/Technicians	12.88	12.03	177
*15.1001*	Construction Engineering Technology/Technician	9.98	5.00	34
*15.0701*	Occupational Safety and Health Technology/Technician	3.08	3.17	18
*15.0201*	Civil Engineering Technology/Technician	1.59	0.88	6
Mathematics and Statistics				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*27.0501*	Statistics, General	48.51	48.51	13
*27.0301*	Applied Mathematics, General	3.73	3.73	1
Science Technologies				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*41.9999*	Science Technologies/Technicians, Other	59.25	59.25	1
*41.0204*	Industrial Radiologic Technology/Technician	25.00	25.00	55
Construction Trades				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*46.0201*	Carpentry/Carpenter	1,646.81	851.83	153
*46.0000*	Construction Trades, General	1,470.06	1,000.90	129
*46.0302*	Electrician	1,221.05	1,187.47	356
*46.0503*	Plumbing Technology/Plumber	891.25	890.61	9
*46.0301*	Electrical and Power Transmission Installation/Installer, General	509.00	379.00	61
*46.0101*	Mason/Masonry	477.82	298.33	27
*46.0401*	Building/Property Maintenance	313.77	243.36	205
*46.0504*	Well Drilling/Driller	200.43	150.40	1
Mechanic and Repair Technologies				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*47.0303*	Industrial Mechanics and Maintenance Technology	572.64	351.47	131
*47.0399*	Heavy/Industrial Equipment Maintenance Technologies, Other	219.08	149.06	1
*47.0201*	Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician	202.00	202.00	518
*47.0603*	Autobody/Collision and Repair Technology/Technician	83.20	23.20	71
*47.0605*	Diesel Mechanics Technology/Technician	54.00	0.00	116
*47.0608*	Aircraft Powerplant Technology/Technician	52.00	52.00	48
*47.0609*	Avionics Maintenance Technology/Technician	13.00	3.00	7
Precision Production				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*48.0508*	Welding Technology/Welder	1,864.00	1,864.00	1,236
*48.0501*	Machine Tool Technology/Machinist	83.52	66.77	104
*48.0510*	Computer Numerically Controlled (CNC) Machinist Technology/CNC Machinist	1.84	2.01	7
Transportation and Material Moving				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*49.0202*	Construction/Heavy Equipment/Earthmoving Equipment Operation	1656.80	761.63	63
*49.0205*	Truck and Bus Driver/Commercial Vehicle Operator and Instructor	236.85	39.75	592
Health				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*51.2202*	Environmental Health	11.22	11.87	56
Business Management				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*52.0302*	Accounting Technology/Technician and Bookkeeping	963.44	904.30	267
*52.0801*	Finance, General	708.10	630.19	740
*52.0101*	Business/Commerce, General	606.47	373.51	671
*52.02*	Business Administration, Management and Operations	365.18	24.66	2,798
*52.1301*	Management Science	230.08	226.75	74
*52.0301*	Accounting	195.76	195.26	952
*52.0409*	Parts, Warehousing, and Inventory Management Operations	111.41	90.04	4
*52.2001*	Construction Management	98.38	83.19	158
*52.1201*	Management Information Systems, General	29.00	28.34	117
*52.0305*	Accounting and Business/Management	19.59	17.68	30
*52.1299*	Management Information Systems and Services, Other	6.69	6.54	27
*52.1601*	Taxation	5.98	5.51	15
*52.1001*	Human Resources Management/Personnel Administration, General	0.77	0.18	23
*52.9999*	Business, Management, Marketing, and Related Support Services, Other	0.75	0.00	13
*52.0304*	Accounting and Finance	0.65	0.59	1
*52.1701*	Insurance	0.57	0.00	16

Critical Fields in Healthcare and Education -- CIP Codes:

Education				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*13.10*	Special Education and Teaching	17.85	29.08	159
*13.13*	Teacher Education and Professional Development, Specific Levels and Methods	9.45	39.68	966
*13.1203*	Junior High/Intermediate/Middle School Education and Teaching	0.00	3.38	97
Engineering Technology				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*15.0401*	Biomedical Technology/Technician	17.53	17.53	21
Library Science				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*25.0101*	Library and Information Science	18.42	16.10	67
Physical Sciences				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*40.05*	Chemistry	5.61	2.58	278
Health				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*51.0904*	Emergency Medical Technology/Technician (EMT Paramedic)	419.34	147.13	709
*51.0705*	Medical Office Management/Administration	95.64	65.68	118
*51.2308*	Physical Therapy/Therapist	95.05	88.26	61
*51.0706*	Health Information/Medical Records Administration/Administrator	55.11	37.85	68
*51.1005*	Clinical Laboratory Science/Medical Technology/Technologist	51.53	47.24	97
*51.3899*	Registered Nursing, Nursing Administration, Nursing Research and Clinical Nursing, Other	39.97	35.53	172
*51.3804*	Nurse Anesthetist	36.60	28.33	39
*51.1501*	Substance Abuse/Addiction Counseling	34.54	16.80	62
*51.1004*	Clinical/Medical Laboratory Technician	34.40	37.96	88
*51.0910*	Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	33.00	34.55	34
*51.0602*	Dental Hygiene/Hygienist	32.00	28.00	78
*51.3805*	Family Practice Nurse/Nursing	29.05	25.82	125
*51.2306*	Occupational Therapy/Therapist	24.50	26.82	51
*51.2001*	Pharmacy	22.04	20.34	189
*51.0912*	Physician Assistant	17.33	13.00	51
*51.0908*	Respiratory Care Therapy/Therapist	15.00	18.46	90
*51.0401*	Dentistry	11.33	3.15	68
*51.0905*	Nuclear Medical Technology/Technologist	8.83	9.00	7
*51.0802*	Clinical/Medical Laboratory Assistant	5.47	6.04	14
*51.3818*	Nursing Practice	3.95	3.51	17
*51.1508*	Mental Health Counseling/Counselor	3.46	1.20	10
*51.2003*	Pharmaceutics and Drug Design	1.05	0.97	9
*51.3803*	Adult Health Nurse/Nursing	0.93	0.83	4
*51.3809*	Pediatric Nurse/Nursing	0.93	0.83	4
*51.0509*	Pediatric Dentistry/Pedodontics	0.67	0.19	4
*51.3806*	Maternal/Child Health and Neonatal Nurse/Nursing	0.23	0.21	1
*51.0803*	Occupational Therapist Assistant	0.00	1.29	61
*51.2401*	Veterinary Medicine	0.00	2.09	82
*51.2501*	Veterinary Sciences/Veterinary Clinical Sciences, General	0.00	0.31	12

Other Priorities -- CIP Codes:

Natural Resources and Conservation				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*03.01*	Natural Resources Conservation and Research	1.70	2.08	73
Communications				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*09.0901*	Organizational Communication, General	8.29	8.50	12
Law				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*22.0302*	Legal Assistant/Paralegal	78.27	68.57	138
English and Literature				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*23.1303*	Professional, Technical, Business, and Scientific Writing	9.85	9.86	2
Public Administration and Social Services				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*44.0201*	Community Organization and Advocacy	38.90	38.81	8
Transportation and Material Moving				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*49.0304*	Diver, Professional and Instructor	26.00	16.00	34
Business Management				
CIP Code	CIP Description	Short-Term Program Gap	Long-Term Program Gap	2012 Completers
*52.0408*	General Office Occupations and Clerical Services	109.23	99.04	11