

Methodology for Updating Programs of Strategic Emphasis
in the State University System of Florida, Board of Governors
CIP 2020 Update

September 2020

The Programs of Strategic Emphasis (PSE) exist as one of several tools for aligning the degree production goals of the State University System with the economic and workforce needs of Florida. Also, the Programs of Strategic Emphasis is a component in Performance Based Funding. This methodology document explains the steps taken in recommending updates to the Programs of Strategic Emphasis based on the changes to the CIP taxonomy that took effect in 2020.¹

The [methodology approved by the Board of Governors at its October 2019](#) meeting serves as the over-arching foundation for this analysis. The guidelines and methods described in that document are fundamental to the recommendations included in this update.

The methodology used to evaluate the CIP 2020 changes and make the recommendations was as follows.

1. An analysis was conducted of the [CIP 2010 to CIP 2020 crosswalk](#) to determine what changes were made to the taxonomy.
2. Utilizing the above analysis, the programs were grouped and filtered based on the action taken with a focus on those programs that were deleted, moved, or added.
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APPENDIX A: Proposed Programs of Strategic Emphasis for the State University System of Florida, Board of Governors CIP 2020 Update

About CIPs

The Classification of Instructional Programs (CIP) provides a taxonomic scheme that supports the accurate tracking and reporting of fields of study and program completions activity. CIP was originally developed by the U.S. Department of Education's National Center for Education Statistics (NCES) in 1980, with revisions occurring periodically since that time as new programs emerged and existing program curriculums evolved.

The CIP taxonomy is organized on three levels:

1. The two-digit series, representing the most general groupings of related educational programs (e.g., 14. Engineering)
2. The four-digit series, representing intermediate groupings of educational programs that have comparable content and objectives (e.g., 14.08 Civil Engineering)
3. The six-digit series, representing specific instructional programs with very similar content and objectives (e.g., 14.0803 Structural Engineering as a subset of Civil)

Postsecondary educational institutions use six-digit CIP codes when completing the IPEDS Completions Survey required for participation in federal financial aid programs. Six-digit codes are the most detailed program classifications within the CIP and represent the basic unit of analysis used by NCES and institutions in tracking and reporting program completions and fields of study data.

Source: [NCES, *Integrated Postsecondary Education Data System \(IPEDS\), online manual*](#).

Proposed Categories for Programs of Strategic Emphasis with Associated CIP

1. Critical Workforce – Education

The Education category is largely based upon the Florida State Board of Education list of critical teacher shortage areas which is published annually. This list can change from year to year but typically remains the same with only one or two additions/deletions. It is also important to consider the critical shortage list within the broader context of the workforce demand for teachers in all specialties, and, for this reason, all teacher education programs were included in the original targeted list associated with the SUS 2005-2013 strategic plan.

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EDUCATION CIP CODES:

- 13.0301 Curriculum and Instruction
- 13.10 Special Education and Teaching (all)
- 13.11 Student Counseling and Personnel Services (all)
- 13.12 Teacher Education and Professional Development, Specific Levels and Methods (all)
 - 13.1211 Online Educator/Online Teaching (new)
 - 13.1212 International Teaching and Learning (new)
 - 13.1213 Science, Technology, Engineering, and Mathematics (STEM) Educational Methods (new)
 - 13.1214 College/Postsecondary/University Teaching (new)
- 13.13 Teacher Education and Professional Development, Specific Subject Areas (all)
 - 13.1339 Teacher Education and Professional Development, Specific Subject Areas, Other (new)
- 13.14 Teaching English or French as a Second or Foreign Language (all)
- 42.2805 School Psychology

2. Critical Workforce - Healthcare

The Healthcare category is based primarily on workforce projections by the Florida Department of Economic Opportunity. These organizations have identified the healthcare professions that exist as critical shortage areas in Florida. Also, a shortage of nursing faculty is frequently cited as a critical need occupation because of the direct impact on registered nurse education programs.

There are several health-related technology and data management programs that have emerged in recent years as high-demand and high-wage occupations. Also, there is a consensus that Florida will need to expand its healthcare workforce in all related occupations as the population continues to grow and the state experiences a demographic transition as the Baby Boom Generation retires.

It is proposed that this category include all health-related degree programs (not just healthcare practitioners) under the 51 CIP Code along with selected programs that may exist under other two-digit CIP families.

HEALTHCARE CIP CODES:

- 30.1101 Gerontology
- 30.3701 Design for Human Health (new)
- 51 Health Professions and Related Programs (all)
 - 51.0512 Digital Dentistry (new)
 - 51.0513 Geriatric Dentistry (new)
 - 51.0514 Implantology/Implant Dentistry (new)
 - 51.0720 Regulatory Science/Affairs (new)
 - 51.0721 Disease Registry Data Management (new)
 - 51.0722 Healthcare Innovation (new)

- 51.0723 Healthcare Information Privacy Assurance and Security (new)
- 51.0921 Hyperbaric Medicine Technology/Technician (new)
- 51.0922 Intraoperative Neuromonitoring Technology/Technician (new)
- 51.0923 Orthopedic Technology/Technician (new)
- 51.1110 Pre-Art Therapy (new)
- 51.1111 Pre-Physician Assistant (new)
- 51.1202 Osteopathic Medicine/Osteopathy (moved from 51.1901)
- 51.1203 Podiatric Medicine/Podiatry (moved from 51.2101)
- 51.1299 Medicine, Other (new)
- 51.1402 Clinical and Translational Science (new)
- 51.1403 Pain Management (new)
- 51.1404 Temporomandibular Disorders and Orofacial Pain (new)
- 51.1405 Tropical Medicine (new)
- 51.1499 Medical Clinical Sciences/Graduate Medical Studies, Other (new)
- 51.1510 Infant/Toddler Mental Health Services (new)
- 51.1511 Medical Family Therapy/Therapist (new)
- 51.1512 Hospice and Palliative Care (new)
- 51.1513 Trauma Counseling (new)
- 51.2213 Patient Safety and Healthcare Quality (new)
- 51.2214 Public Health Genetics (new)
- 51.2300 Rehabilitation and Therapeutic Professions, General (new)
- 51.2315 Drama Therapy/Therapist (new)
- 51.2316 Horticulture Therapy/Therapist (new)
- 51.2317 Play Therapy/Therapist (new)
- 51.2605 Physical Therapy Technician/Aide (new)
- 51.3202 Health Professions Education (new)
- 51.3203 Nursing Education (moved from 51.3817)
- 51.3204 Medical/Health Humanities (new)
- 51.3205 History of Medicine (new)
- 51.3206 Arts in Medicine/Health (new)
- 51.3299 Health Professions Education, Ethics, and Humanities, Other (new)
- 51.3824 Forensic Nursing (new)

3. Economic Development - Global Competitiveness

The Global Competitiveness category represents more of an over-arching concept found in the various reports reviewed rather than a specific industry or occupational area. Degree programs that assist in making the SUS globally competitive can be found throughout the system across many disciplines, especially within the sciences, engineering, and information technology programs. However, there are programs that directly support globalization through program graduates and focused research. Some of these programs have an international focus, such as international affairs, interl76(at)-11.3 (i)-17.4 (an)-16.6 (al)-0.7 ()0.7 bu(s)-22.7 (i)-0.7 ((es)-6 (s)-6 (,)-11.4 ()0.7 (i)-0.7 (nt)-ndher t(e)0.7 berd (l)-0.7 (l)-17.3 a()0.7 (f) iacresinglobalizatio.

It is proposed that this category include only programs for which a strong case has been made for enhancing Florida's global competitiveness.

GLOBAL COMPETITIVENESS CIP CODES:

- 05.0103 Asian Studies/Civilization
- 05.0107 Latin American Studies
- 05.0134 Latin American and Caribbean Studies
- 05.0201 African American/Black Studies
- 13.0701 International and Comparative Education
- 16.0101 Foreign Languages and Literatures, General
- 16.0102 Linguistics
- 16.0399 East Asian Languages, Literatures, and Linguistics, Other
- 16.0904 Portuguese Language and Literature
- 16.0905 Spanish Language and Literature
- 16.1701 English as a Second Language (new)
- 22.0210 International Business, Trade, and Tax Law
- 30.2001 International/Global Studies
- 30.4001 Economics and Foreign Language/Literature (new)
- 45.0901 International Relations and Affairs
- 52.1101 International Business/Trade/Commerce
- 52.1502 International Real Estate - CIP assigned by BOG staff (does not exist in NCES)

4. Economic Development – STEM

STEM is a critical category in that it emphasizes the importance of science, technology, engineering, and mathematics programs to Florida's economy. Active STEM lists were researched to identify those that are used nationally

- 01.0100 Agriculture, General
- 01.0308 Agroecology and Sustainable Agriculture
- 01.09 Animal Sciences
- 01.10 Food Science and Technology
- 01.11 Plant Sciences
- 01.12 Soil Sciences
- 01.1302 Pre-Veterinary Studies (moved from 51)
- 01.1399 Agriculture/Veterinary Preparatory Programs, Other (new)
- 01.8 Veterinary Medicine (moved from 51)
 - 1.8001 Veterinary Medicine (moved from 51)
 - 1.8100 Veterinary Biomedical and Clinical Sciences (moved from 51)
 - 1.8101 Veterinary Sciences/Veterinary Clinical Sciences, General (moved from 51)
 - 1.8105 Veterinary Anatomy (moved from 51)
 - 1.8109 Veterinary Physiology (moved from 51)
 - 1.8107 Veterinary Microbiology and Immunobiology (moved from 51)
 - 1.8108 Veterinary Pathology and Pathobiology (moved from 51)
 - 1.8111 Veterinary Toxicology and Pharmacology (moved from 51)
 - 1.8103 Large Animal/Food Animal and Equine Surgery and Medicine (moved from 51)
 - 1.8104 Small/Companion Animal Surgery and Medicine (moved from 51)
 - 1.8102 Comparative and Laboratory Animal Medicine (moved from 51)
 - 1.8110 Veterinary Preventive Medicine, Epidemiology, and Public Health (moved from 51)
 - 1.8106 Veterinary Infectious Diseases (moved from 51)
 - 1.8199 Veterinary Biomedical and Clinical Sciences2 (22L 1 0 rT1 (i)11.ET EMC08 Tw 1.636 0 T

11.0205 Computer Programming, Specific Platforms (new)

11.0902 Cloud Computing (new)

11.0999 Computer Systems Networking and Telecommunic

- 30.19 Nutrition Sciences
- 30.25 Cognitive Science
 - 30.2502 Contemplative Studies/Inquiry (new)
 - 30.2599 Cognitive Science, Other (new)
- 30.27 Human Biology
- 30.30 Computational Science
- 30.31 Human Computer Interaction
- 30.32 Marine Sciences
- 30.33 Sustainability Studies
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- 52.1304 Actuarial Science
- 52.1399 Management Sciences and Quantitative Methods, Other
- 52.1404 Digital Marketing (new)

5. Critical Workforce – Gap Analysis

Gap Analysis is a category that includes degree programs leading to the occupational categories projected to be critically under-supplied in the Board of Governors' analysis of labor market projections and related degree production. Consequently, the academic programs included in this category correspond to Florida's high-need, high-wage occupational areas identified through the gap analysis. A comprehensive methodology for conducting the gap analysis is available on the Board of Governors' website. The results from the most recent gap analysis were used, combined with the new CIP 2020 to SOC 2018 crosswalk, to identify programs that should be added to this category.

Institutions will still be expected to work with local industries and employers to identify academic programs needed to support local or regional economic development and workforce needs.

This category only includes academic programs identified in the gap analysis that are not included in another category of Programs of Strategic Emphasis (e.g., industrial engineering would be captured under STEM, so it is not necessary to include it under gap analysis).

- 52.0215 Risk Management (new)
- 52.0301 Accounting
- 52.0303 Auditing
- 52.0304 Accounting and Finance
- 52.0305 Accounting and Business/Management
- 52.0801 Finance, General
- 52.0804 Financial Planning and Services
- 52.0806 International Finance
- 52.0807 Investments and Securities
- 52.0808 Public Finance
- 52.0809 Credit Management
- 52.0810 Financial Risk Management (new)
- 52.1001 Human Resources Management/Personnel Administration, General
- 52.1003 Organizational Behavior Studies
- 52.1401 Marketing/Marketing Management, General
- 52.1402 Marketing Research
- 52.1403 International Marketing
- 52.1501 Real Estate
- 52.1601 Taxation
- 52.1701 Insurance
- 52.1905 Tourism and Travel Services Marketing Operations14e4ged (DC)A (i1 T)19 243 (14)1[(e)181