Academic Program Planning and Development Data Resources
For additional information on (or assistance with) these resources, contact Margot Neverett at neverettm@ecu.edu.

APD DATA RESOURCE GUIDE:

This guide has been developed specifically for those working on a program proposal for Academic Program Planning and Development. Each resource below has been specifically included because of its relevance to data-driven items in the required forms. Please take the time to review this guide in its entirety, and use the step-by-step instructions as you navigate each site to obtain relevant data. If you run into any questions or issues with these resources, do not hesitate to contact Dr. Margot Neverett (neverettm@ecu.edu), Director of Institutional Research.

WHAT IS A CIP CODE, WHY IS IT IMPORTANT, HOW IS IT USED

- Each university-level academic degree program has an assigned CIP (Classification of Instructional Program) code. The purpose of CIP codes is to provide a taxonomic scheme that will support the accurate tracking, assessment, and reporting of fields of study and program completions activity.
    - o The CIP taxonomy is organized on three levels: 1) the two-digit series, 2) the four-digit series, and 3) the six-digit series. The two-digit series represent the most general groupings of related programs. The four-digit series represent intermediate groupings of programs that have comparable content and objectives. The six-digit series, also referred to as six-digit CIP Codes, represent specific instructional programs.

- To help determine the CIP code which should be assigned to a new program, you can **browse** or **search** CIP codes on NCES's IPEDS site: https://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55. Select the **resources** link on this page to access additional information regarding CIP codes and historical versions of the CIP taxonomy.

- CIP codes are useful in a number of ways. A few aspects particularly relevant to the Academic Program Development process include:
    - o Degree programs data is often organized by CIP in order to ensure comparability across campuses; thus, many of the resources you encounter for creating your proposal will provide data organized (and searchable) by CIP code. For example, in order to find the number of degrees conferred in a program or the number of similar programs in the state at the IPEDS Data Center, you'll need to search by program CIP code.
    - o CIP codes are also used to align degree programs with occupational categories. For example, SOC (Standard Occupational Classification) Codes are a commonly used system to classify occupational fields. The National Center for Education Statistics provides a **CIP-SOC crosswalk**, which is an important tool for relating data about programs to data about occupations and the labor market. This CIP-SOC crosswalk can be downloaded as an excel file from http://nces.ed.gov/ipeds/cipcode/resources.aspx?y=55. To use this crosswalk, first locate the CIP code associated with your program of interest (e.g. African and African American Studies, 05.0201). Then, simply read across the row to locate the title of the CIP code, the aligned SOC code (in this case, 25-1062), and the SOC code title (Area, Ethnic, and Cultural Studies: Teachers, Postsecondary). In most cases, the CIP will be associated with multiple SOC codes. This is indicative of the fact that program graduates are likely to seek employment in a number of different occupational fields.

- If you are unsure what CIP code is assigned to a program are proposing a change (or assigned to similar programs on currently on campus), you can locate the CIP code on ECU's Academic Program Inventory, located here: https://www.northcarolina.edu/apps/programs/index.php

AVAILABLE RESOURCES: STUDENT ADMISSIONS, ENROLLMENT, AND DEGREES AWARDED

- *UNC Data Dashboard (UNC-SO)* (https://www.northcarolina.edu/impact/stats-data-reports/)
  - The UNC Data Dashboards are interactive, online tools that provide access to UNC system data. Six interactive dashboards are available at the website. Of particular interest to Program Development submissions are: (1) **enrollment** (provides enrollment trends across the UNC system and enrollment demographics), and (2) **degrees** (provides degree completion data for over 200 academic programs (CIP codes) listed across campuses; sortable by year, level of degree, student demographics, and field of study).
  - Detailed instructions for using this dashboard are provided in the document below.

- *IPEDS Data Center* (http://nces.ed.gov/ipeds/datacenter/)
  - IPEDS is the core postsecondary education data collection program for the National Center for Education Statistics (U.S. Department of Education). Data are collected from all primary providers of postsecondary education in the country in a number of areas. Of particular interest to Academic Program Development proposals, will be the **program completions** (i.e., degrees awarded) data that can be retrieved through the 'compare institutions' data tool.
  - Detailed instructions for using this site are provided in the document below.

- ECU Interactive Analytics Portal and Online Fact Book (https://performance.ecu.edu/portal/)
  - The ECU Analytics Portal allows for easy viewing of data related to ECU students, staff, and faculty. Information about the University and its operations (e.g., admissions, degrees, and enrollment) is available via the interactive ECU Fact Book. Additional details regarding specific academic programs (including student and faculty profiles, student credit hours, and grade distributions) are also available to those with ECU log-in credentials. Upon login, look for the folder of reports titled "Academic Program Profiles."

- Economic Development and Employer Planning System (EDEPS) (http://www.edeps.org/)
  - EDEPS is an analytical tool for business, education, workforce and economic planners. The online Occupational Supply Demand (OSD) tool depicts an interaction of supply and demand within the occupational labor market. The number of program completers is used as a proxy for supply in the market, while occupational projections and wage

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trends are used as a proxy for demand in the market. Programs and occupational fields are clustered into broader units of analysis using CIP-SOC mappings. Through this online tool, one can obtain IPEDS data regarding number of degrees awarded to a specific CIP and degree level, as well as BLS data for projected employment growth rates, the average number of annual openings, median annual wages, and typical work experience/training/education for occupational fields related to the select program CIP code. This is a great resource for understanding the CIP-SOC relationship and outlook for a specific program of interest, however, because this is a secondary provider of data, some of the information available through this site may be outdated as compared to primary source (i.e., IPEDS website, BLS website, etc.).

AVAILABLE RESOURCES: EMPLOYMENT/OCCUPATIONAL/ INDUSTRY INFORMATION

- *NCWorks* (www.ncworks.gov)
  - o NC Works is an online resource for job seekers and employers in North Carolina.   Within this online system is a Labor Market Analysis Dashboard (https://www.ncworks.gov/vosnet/dashboards/defaultana.aspx?menuid=MENU_START_PAGE_DASHBOARD_ANA&pu=1&plang=E). This dashboard can be used to obtain occupational data related to a geographic area, a specific job industry, or an educational program. This site can be particularly useful for addressing items in the APD Appendices asking for evidence of societal demand and employability of graduates.
  - o Detailed instructions for using this dashboard are provided in the document below.

- *NCTower* (http://nctower.com/)
  - o NC Tower provides data for recent graduates of the North Carolina Community College System and from University of North Carolina system schools. Employment rates, wages, and ongoing higher education enrollment of graduates is available. Information in NC Tower can be viewed at an aggregate level (e.g., outcomes for all bachelor's degree earners in North Carolina, regardless of where they went to school or what they studied). It can also be broken out by broad subject areas (e.g., 2-digit Classification of Instructional Program code), specific subject areas (e.g., 6-digit Classification of Instructional Program code), and campus. Employment and wage information can also be broken out by the industrial sector of the student's employment, while data on further enrollment in higher education can be broken out by level of study.
  - o Detailed instructions for using this site are provided in the document below.

- *United States Bureau of Labor Statistics* (http://www.bls.gov/)
  - o Every other year, the Bureau of Labor Statistics updates its employment projections for occupations. The data for the 2018-2028 projections are searchable in a number of different locations and data formats. Two searchable databases provided by BLS include:
    - ▪ (1) The National Employment Matrix database, which displays data on 2016 and projected 2026 employment and employment change (searchable by occupation or industry). For example, data on secretaries and executive assistants can be found across all industries in which they are employed, and data on the construction industry can be displayed by detailed occupation.
    - ▪ (2) The Occupational Projections Data database, with displays data on 2016 and projected 2026 employment, employment change, job openings, education,

training, and wages for each detailed National Employment Matrix occupation. Users can obtain specific data for any occupation in the matrix and compare the results with data on other detailed occupations.

- o The data also appear in the "Job Outlook" section of the [Occupational Outlook Handbook](#). This site also provides succinct narrative descriptions of occupational fields and growth projections.

- *North Carolina Department of Commerce* (http://www.nccommerce.com/)
  - o NC Commerce is the state's lead agency for economic, community, and workforce development. The department regularly publishes data, statistics, information, and reports regarding the state's economy.
  - o Within NC Commerce, the *Labor and Economic Analysis Division (LEAD)* (http://www.nccommerce.com/lead/data-tools) prepares regular analysis of the states' industry sectors, workforce, and key economic trends. This link serves as a gateway to various labor market information, including labor force statistics, occupational and industry projections, and demographic reports.
  - o NC Commerce also houses the *Demand Driven Data Delivery System* (D4) (http://d4.nccommerce.com/), which is an application providing easy-access to labor market data produced by LEAD, BLS, and other sources. Users can review BLS data sets such as the Current Employment Statistics (CES) and the Occupational Employment and Wages in North Carolina (OES) at the state-, county-, or workforce development area-level.

DETAILED INSTRUCTIONS: UNC DATA DASHBOARD (ENROLLMENT AND DEGREES)

➢ The UNC System Office has provided this portal as a resource for accessing a wealth of information related to UNC system including student enrollment and degrees awarded by program area (associated with CIP code). Eight interactive dashboards are available for use; however, the instructions below provide a step-by-step guide for retrieving enrollment figures for a specific degree program. Similar steps can be followed within the degrees dashboard to obtain number of degrees awarded for a specific program.

1. Using Chrome or Firefox as your web browser, follow this link to the UNC Data Dashboard home page: https://www.northcarolina.edu/impact/stats-data-reports/
2. There are six dashboards available available through the System Office. Select **"Enrollment"**. This will initiate a SAS program/dashboard to open in a separate window. It may take a minute to load.
3. The Enrollment Dashboard should appear with a colored graph as the focal point of the page. As you look to the top of the page, you should see 2 rows of tabs. These two rows will always be at the top of the webpage, and allow you to navigate the site. The top row provides different options for exploring enrollment figures. Currently, we are interested in enrollment numbers for a specific program, so we will want to select **"Student Majors"**.
4. The second row of tabs along the top of the screen allows the option of including enrollment numbers across all UNC System Universities by selecting "UNC Total", or by just 1 University at a time. Select **"ECU"** (or any other UNC School that houses the program of interest for your search).
5. Next, review your options for filtering the data based upon your specific data needs:

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- o For **"Year"**, you may select one or more Academic Fall terms to include in the data set.
- o For "Enrollment Measure", leave **"Student Count"** selected as the default.
- o For "Degree/Non-Degree-Seeking", select only **"Degree-Seeking"** student to include in your enrollment counts.
- o For "First/All Majors", leave **"First Major"** selected as the default.
- o For **"Degree Level" and "Student Level"**, select the levels you are interested in capturing (e.g., Bachelor's Master's, etc.).   You may consider selecting more than 1 level if you are interested to see enrollment numbers for 'similar' programs to the one of focus in the proposal. Also note that post-master's certificate programs are classified under "Intermediate/Specialist degrees".
- o Finally, you'll want to select the name of the program you are interested in. If you already have a specific program in mind, you can go directly to the right column labeled **"Specific Area of Major"** and make your selection. If you are unsure of the specific area or would like to first view a broader scope of enrollment data, you may select a **"Broad Area of Major"**. This selection allows you to view the larger set of data as a whole, with 2 options for further refining the selection:
    - ▪ By selecting a field in the "Broad Area of Major", listing options under "Specific Area of Study" will automatically be updated to include only those under the broader domain. You may review this updated list and select one or more 'specific' areas that are relevant to your search.
    - ▪ By selecting a field in the "Broad Area of Major", the data table at the bottom of the page will also be automatically updated. You can then interact with the table (further discussed below) in order to expand this broad category into all specific sub-categories under that broader program heading.
6. As you have made each of the selections outlined above, you may have noticed the data table at the bottom of the screen automatically updating. This **interactive table** automatically populates per all of your selection criteria and update as you make changes (indicated by a green spinning wheel in the lower right corner of the object block). Each row of table provides data for a single "Area of Study", labeled in the first column on the left hand side; columns are provided for student level and/or degree level categories you have selected; and each cell is filled with the enrollment headcount for the cross-referenced categories, labeled as "Student Counts" at the top of the table. There are 2 important notes to keep in mind when viewing this data table.
    - o First, by clicking anywhere on the table (or any other object block for that matter), you should see 3 blue icons appear at the top. The **arrow/funnel icon** allows you to view a listing of the variables that have been filtered based upon your selections, the circled **'i' icon** will tell you the name of the table, and the **2 squares icon** will allow you to minimize/maximize the table for ease of viewing.
    - o Second, by right-clicking on the table, you will see an option to **"Export Student Majors Table"**. By selecting this option, you can export the table in an excel format and then save it for future use. Data will be exported in a similar format to what is on the screen, and include a statement describing the filters you have applied when generating the dataset.
7. As a final note, please be aware of the **"About the Dashboard"** tab located at the top of the page. This is the right-most tab in the top row of options (2 down from where you selected "Student Majors" earlier). Here you may find additional information about using the dashboard, definitions for terminology you may be unfamiliar with, and notes about the data sources.

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DETAILED INSTRUCTIONS: IPEDS DATABASE (DEGREES AWARDED)

➢ The IPEDS Data Center is a centralized location for information from ALL schools required to submit data to IPEDS. Data of particular interest to the APD Appendices includes number of programs offered and number of degrees awarded. The instructions below guide you through the process of retrieving number of degrees awarded for a specific program of interest.

1. Follow this link to the IPEDS Data Center: http://nces.ed.gov/ipeds/datacenter/
2. Locate and click on **"Compare Institutions"**.
3. Be sure 'Final Release Data' is selected on the right side of the screen.
4. On the next screen ("compare institutions"), move your cursor over **"By Groups"** under the heading "How would you like to select institutions to include in your data file/report") and then click on **"EZ Group"**.
5. On this screen, you are going to select the institutions you want to include in your data file/report. There are a number of selection criteria from which to choose. If you wish to have information about all North Carolina schools, click on **"State or other jurisdiction"** and then check "North Carolina." If you then wish to further filter the results to only those schools in North Carolina which are part of the state university system, click on **"Sector"** and then check "Public, 4-year or above." Other options would be to select all schools in the Southeastern United States (by clicking on "Geographical region" and checking "Southeast…") and/or to select only those schools which offer a Master's degree or higher (by clicking on **"Highest degree offered"** and checking "Master's degree" and one or more of the "Doctor's degree" categories). A summary of the criteria you have selected will appear at the bottom of the screen and the number of institutions included will appear near the top-right of the screen. Once you have made all your selections, click the **"Search"** button (located in a grey box).
6. After you select "Search," a screen will appear listing all of the schools that will be included in your data file/report. You now are ready to select **"Variables"**. To do so, click on the blue **"Continue"** button located in the sentence "When you have finished selecting institutions, CONTINUE to Step 2 – Select Variables."
7. Make sure that the **"Browse/Search Variables"** option is selected under the question "How would you like to select variables to include in your data file/report?" Then, to select the number of degrees awarded (by CIP code) at the schools in your search, click the plus box next to **"Completions"** and then the first plus box next to **"Awards/degrees conferred by program (2010 CIP classification), award level, race/ethnicity, and gender – includes new race/ethnicity and award level categories"**.
8. Even though you are not going to create a report broken out by gender, click the plus box next to **"Gender – 2009-10 to current year"** and make the following selections to include total degrees awarded:
   o Step 1: Select Year(s)
     ▪ **Year(s)**: check the box next to one or more report years for which you want data. (Typically, you will want only the most recent four years of data available.)
   o Step 2: Select Qualifying Variable(s)
     ▪ Click on "First or Second Major," check the box for **"First major"**, and click "Save" (in the top right corner of the screen).
     ▪ Click on **"CIP Code – 2010 Classification".** Each degree program at ECU has an assigned CIP code. If you are unsure what CIP code is assigned to the program(s) for

which you are conducting a search, you can find a list of ECU degree programs with their CIP codes here: https://www.northcarolina.edu/apps/programs/index.php (You'll need a six-digit code which will be a combination of the numbers in the "Div" column and the numbers in the "Code" column; e.g., for the BA in African and African American Studies, the six-digit CIP code would be 050201.) Once you know the CIP code(s) for the program(s) for which you are conducting a search, click on the plus box next to the category listed by 2-digit CIP (e.g., for the BA in African and African American Studies, you would click on the plus box next to "05 – Area, Ethnic, Cultural, Gender, and Group Studies"). Then, click the plus box next to the 4-digit CIP code. (In our example, you would check next to "05.02 – Ethnic, Cultural Minority, Gender, and Group Studies.") Finally, check the box next to the specific 6-digit CIP and click
"Save" in the top right of the screen.

- Click on **"Award Level code"** and check the box next to the degree level(s) you want to include in your data file/report (e.g., "Master's degree" under "Degrees total"). Click on "Save" in the top right corner of the screen.
  - o Step 3: Select from the list of variables
    - Check the box next to **"Grand total".**

9.   After you have made all of your variable selections, scroll back to the top of the page and click on the **"Continue"** button in the blue box next to "When you have finished selecting variables from the tree, click Continue." A screen will appear listing all of the variables you have chosen to include in your data file/report.
10. Click the blue **"Continue"** button again (on the right side of the page). The next screen allows you to choose options for your data file/report. Let these options remain at the default settings and click the **"Continue"** button once again.
11. You will be prompted to open the resulting file with Microsoft Excel; **click open**. You now have a file with a list of the schools and the variables for which you searched. Save the file to your computer using a file name that will remind you of its contents.

DETAILED INSTRUCTIONS: NC WORKS (SOCIETAL DEMAND AND EMPLOYABILITY)

➢   NC Works is an online resource for job seekers and employers in North Carolina.   Within this online system, is a Labor Market Analysis Dashboard that can be used to obtain occupational data related to a geographic area, specific job industry, or educational program. This site can be particularly useful for addressing items in the UNC-SO forms asking for evidence of societal demand and employability of graduates.

1.   Open the NC Works Online Workspace at the following link: https://www.ncworks.gov/vosnet/dashboards/defaultana.aspx?menuid=MENU_START_PAGE_DASHBOARD_ANA&pu=1&plang=E).
2.   Along the left side of the screen you will see a listing of available types of information at this site. In particular, notice the **"Labor Market Profiles"** options.
3.   There are options to view an overall state-level profile of the labor market ("area profile"), or select profiles based upon an occupation, industry, or employer. Of particular interest, is the **"Education Profile"**, where you are able to view a labor market profile for a particular education field. When

hovering over "Education Profile", you will see a number of options; start by clicking **"Education Summary"**.

4. You can identify the education program of interest by keyword, program area, occupation, etc., however, if you know the program CIP code, then simply select **"Programs by Program Code"** and enter the 6 digit CIP code. Also note, that you can change the area of interest on this screen – options include state, county, economic zone, etc. After typing the 6-digit CIP, you will confirm the selection by clicking the CIP/title hyperlink.

5. Once making the selection, you are defaulted to a profile summary page. Notice that at the top of the screen, there are options to (1) compare this program area to other program areas, and (2) view more detailed job and program summaries, and information on related occupations and licensure.

    o The **"Summary"** page will provide the IPEDS description for the selected program CIP code, as well as a brief overview of current jobs available, occupations related to the select program, and the number of program completers in the area.

    o The **"Jobs"** tab will provide more detailed information on currently advertised online job postings to include where in the state jobs are being advertised as well as the most commonly advertised job skills and certifications. Note that by clicking on the number corresponding to each of these locations, skills, etc., you can see the individual job posting(s) underlying this data.

    o The **"Program Completers"** and **"Program Providers"** tabs will provide detailed information on the number of degrees awarded, by level and institution, in the select program CIP in the state. Note, that unfortunately, you cannot cross-list level and institution to find only programs awarding degrees at a certain level (e.g., Master's).

    o The final tab, **"Related Occupations and Licensure"** provides a list (based upon the same CIP-SOC mapping discussed in other sections of this document). Here, you are not only able to see related occupations to the program of interest, but by clicking on the related occupational title, you can see additional information regarding this field.

        ▪ Notice that once again, for this select occupational field, you are presented with the same layout (tabs at the top of the page) regarding summary and detailed information. Here the detailed info is about the jobs available, supply and demand in the field, and projected employment and wages.

6. Note that constructing a comprehensive labor market profile is not an exact science. One must explore a bit between educational information and occupational information to create a full picture. Please take your time to develop a thorough understanding of your program and the employment opportunities that are likely to be available to your program's graduates. Also be sure to report numbers accurately and with data source notes.

DETAILED INSTRUCTIONS: NC TOWER (LONGITUDINAL FOLLOW-UP OF NC GRADUATES)

➤ NC Tower provides data for recent graduates of the North Carolina Community College System and from University of North Carolina system schools. Employment rates, wages, and ongoing higher education enrollment of graduates is available. Information in NC Tower can be broken out by broad subject areas (e.g., 2-digit CIP code), specific subject areas (e.g., 6-digit CIP code), and campus. Employment and wage information can also be broken out by the industrial sector of the student's employment, while data on further enrollment in higher education can be broken out by level of study. The instructions below guide you through the process of retrieving post-graduation North Carolina employment & education information by university, level, and program.

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1. Follow this link to the NCTower website: http://nctower.com/ and click **"Get Started"**
2. At the top of the screen, locate the "Start a search for outcome data" block and select **"Public Universities"** from the drop-down menu. Click **"Go".**
3. Under **"Public University Program Finder"** (about half way down the page), make the following choices:
   - **Credential:** Select the degree level for which you want employment data.
   - **Campus**: Select "East Carolina University".
   - **CIP code:** Type in the 6-digit CIP Code of the program for which you want post-graduation employment data. (For example, to find post-graduation employment for ECU degree recipients who received a MA in Applied Economics, you would type in 45.0602.)
4. Click on the **plus symbol** to the left of the listed degree for which you want post-employment data to add it to "Your Program Selections".
5. Repeat the process described above if you wish to add additional degrees/programs to your selections.
6. Click on the button labeled **"View Outcomes".**
7. On the subsequent screen, under "Query Information", you may elect to change school year for which you would like to obtain data. The default **"2015-2016"** selection, however, allows for 6 years of follow-up employment data to be included for your program graduates.
8. As you scroll down the page, you will see graphs for each of the following:
   - Number of Students and Graduates (for year selected)
   - Post-Graduation Employment in North Carolina (for years post-graduation)
   - Mean Annual Wages (for years post-graduation)
   - Median Annual Wages, with 25th to 75th Percentile Range (for years post-graduation)
   - Post-Graduation Enrollment in North Carolina Public Higher Education
   - Post-Graduation Enrollment or Employment in North Carolina
9. At the top right of each graph, is a button labeled **"View Table".** Click this button if you prefer to see the data in tabular, rather than graphic, form. Next to the "View Table" button is a button labeled **"Info".** Click on this button for a graph/table if you would like more information on which students/ degree recipients are included in the counts or how each metric is calculated.
10. A chart **can be downloaded** as .png, .jpg, .xls, or .pdf files by clicking on the **" = "** symbol in the top right corner of a chart
11. An Excel file containing ALL of the NC Tower data for a given year can be downloaded by selecting 'About' -> 'Data Download' at the top of the page; or by clicking here: http://nctower.com/aboutdownload/

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