OHIO BOARD OF REGENTS

Higher Education Information (HEI) System

Data Submissions Manual

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THIS DOCUMENT CAN BE VIEWED OR PRINTED FROM THE HEI WEBSITE:

http://www.regents.ohio.gov/hei.

HEI - WHAT IS THE HIGHER EDUCATION INFORMATION SYSTEM (HEI)?

History of HEI:

State Higher Education in Ohio is a pluralistic, decentralized, large, and complex system. There are 79 campuses operated by 38 state supported institutions with over 550,000 students enrolled in over 120,000 courses taught by 50,000 faculty each term. The system is made up of over 100 million square feet of space with over $5 billion in annual campus operating budgets. The legislature annually provides around $2.4 billion in state operating and capital subsidy via complex formulas.

Higher Education Information, known as HEI, is the replacement for the Ohio Board of Regents' original data collection mechanism, the Uniform Information System (UIS). The Ohio Board of Regents began HEI with a three-year development process in 1995 and implemented the Higher Education Information system in winter of 1998. The State provided a total of $8 million over 4 years for this project. Hundreds of contributors, including information systems staff throughout the state, campus leaders, HEI Staff, the HEI Advisory Committee, the Governor and the General Assembly participated in the creation of HEI.

What made the collaboration work? Here is a partial list of factors: the consultative process throughout the State, a fixed system start date of winter 1998, expertise in State on electronic student information systems, the desire of the State for HEI to serve campus needs, and the timing of national web development.

Statistical Overview – Volume of Data

Data files are submitted daily by campuses throughout Ohio. Files are edited for accuracy and loaded into the HEI database. There have been over 260,000 "Edit and Load" processes since Winter 1998. The production environment consists of more than 500 tables containing approximately 35 million rows of data. The HEI data warehouse consists of more than 1500 tables.

The Ohio Board of Regents relationship with Campuses

The Ohio Board of Regents is a coordinating body and not a governing body. This means that the Regents assist campuses, but do not have the authority to mandate policy.

The HEI Advisory Committee serves to provide input to Regents staff regarding the file submission process as well as to provide input on reporting needs from campuses.

The Technology

Regarding the processing of data files, the primary technical distinction between HEI and the former UIS system lies in the use of the Internet by campuses to transmit and process data files to the Ohio Board of Regents.

HEI is a data warehouse with web-based input and output. It strives to be fast, accurate, interactive and user-friendly. Multiple programming languages are used: COBOL, SQL, Perl, HTML, and JavaScript.

What kind of data does the HEI system contain?

Data is submitted via data files which are grouped by Data Areas. Each data file has its own 2 letter designation. For example, the letter designation for the Course Inventory file is (CI) and it is grouped in the Enrollment Data Area. The professor teaching the course will be submitted in the Course Sections Taught (ST) file in the Faculty-Staff Data Area.

The HEI data warehouse stores various file submissions and organizes data into the following data areas:

Academic Program Data Area

File Submissions:
Academic Programs (AP)

Enrollment Data Area

Term File Submissions:
Alternative Credit (AC)
Course Enrollments (CN)
Course Inventory (CI)
Course Sections Taught (CT)
Cross Registration (XR)
Flexibly Scheduled course sections (FS)
Grade Explanation (GE)
Off-campus Course Sections (OC)
Student Enrollment (SN)
Student Entrance (SE)

Annual File Submissions:
Cohort Tracking (CT)
Degree/Certificate Earned (DC)
Extended Programs (EP)
Extended Students (ES)
Graduate and Professional Admissions (GP)
High School of Graduation (HG)
Identifier Change (IC)
Preliminary Headcount (PH)
Special Cohort Tracking (SC)
Tech Prep Consortium Tracking (TC)
TRIO Tracking (TR)
Subsidy FTE Projections (SI) – (Not yet released)

Facilities Data Area

File Submissions:
Area Inventory (AI)
Course Section Schedule (CS)
Facilities Identifier Change (FC)
Other Use of Instructional Rooms (OR)
Other Sources of Funds (OS)
Course Sections Taught (ST)
Physical Structure Inventory (PS)

Faculty-Staff Data Area

File Submissions:
All Employee (AM)
Faculty and Instructional Non-faculty Demographics (FD)
Identifier Change (IC)

Financial Aid Data Area

File Submissions:
Academic Scholarship (AS)
Instruction Grant Adjustment (IA)
Instruction Grant (IG)
NEALP Adjustment (NA)
NEALP Certification (NT)
NEALP Verification (NV)
Ohio College Opportunity Grant Certification and Adjustment (OG)
Student Choice Grant Adjustment (SA)
Student Choice Grant Program Certification (SH)
Independent, Proprietary, and Non-Ohio Colleges and Universities Degree/Certificate Earned (PD)
Independent, Proprietary, and Non-Ohio Colleges and Universities Student Entrance (PE)

Financial Data Area

File Submissions:
Funds Assets and Liabilities (AL)
Budget Data (BD)
Changes in Funds Balances (CB)
Changes in Current Funds (CF)
College Expenditure (CP)
Education and General Funds Expenditure (EE)
Faculty and Instructional Non-faculty Funding (FF)
Funding Unit Expenditure (FX)
Instruction and General Expenditures by Object (IO)
Sources of Education and General Revenues (SR)

Financial Data Area (Con't)

War Orphans Scholarship Adjustment File (OA)
War Orphans Scholarship (WO)

Affiliated Data Areas

Capital Planning
IPEDS (Integrated Postsecondary Education Data system)
Transfer Assurance Guides
Tech Prep
OCAN (Ohio College Access Network)
OLN (Ohio Learning Network)
NEALP (Nurse Education Assistance Loan Program)
TRIO
Non-Credit

Where does the data originate? Who contributes to the HEI system?

Public postsecondary institutions in Ohio and industry groups submit the data to the Ohio Board of Regents via the HEI system. On occasion, some private schools submit data. Data Reporters for each institution and data area are listed on the HEI website at http://regents.ohio.gov/hei/people.php.

SECURITY - DATA PROTECTION AND ACCESS

How is this data protected?

HEI implements sophisticated security methods with varying levels of user access. Access is restricted to designated campus personnel based on user authentication.

HEI uses a web standard called SSL (http://en.wikipedia.org/wiki/SSL) to protect all communications. Data is shared on a very limited basis. See the Data Access Policy below.

What should HEI campus data reporters do to protect sensitive information?

While using the HEI system to submit data or to generate queries, follow these simple steps to protect sensitive information. *These suggestions are not intended to replace campus information technology user guidelines or policies*, but are generally considered good practice.

1. **Lock your computer screen at all times** when you step away from your work area. XP users can lock their PC's by pressing (Ctrl - Alt - Delete). Accessing your PC will require your password. This will prevent any unauthorized use of your PC or the HEI system.

2. **Use student identifiers, known as PII (personally-identifiable information) only when necessary to send information to the HEI system or receive information from HEI.** The use of portable media (CD's, DVD's, flash drives, notebook PC's, text messages) or the use of the Internet to transport personally identifiable student or faculty information off campus should follow strict campus information security policies. The use of encryption software to protect sensitive electronic data is generally considered a good practice.

3. **Do not send personally identifiable student information (PII) in an e-mail.** If transmitting student identifiers, please use the HEI secure transmission site at https://qry.regents.state.oh.us/cgi/hei_secure_file_transfer_cgi. The HEI secure site uses data encryption and user accounts to protect information. The secure site requires an HEI account for the recipient.

4. **Set your internet browser to delete all cache.** When web queries return data onto your browser, the information is stored in your cache (Temporary Internet Files on Internet Explorer). There are settings that will delete the cache when the browser closes, thereby eliminating the possibility of sensitive data being stored on your C: drive. On Internet Explorer, select Tools <> Internet Options <> Advanced <> Scroll to bottom under Security and check "Empty Temporary Internet Files folder when browser is closed."

5. **Log out of the HEI system immediately when your work is complete.**

6. **Change passwords to HEI accounts regularly**. Sharing of HEI web accounts and passwords is prohibited. Change passwords frequently, as determined by your HEI liaison.

7. **Avoid faxing personally identifiable information**. Communicate information via a telephone call directly to HEI / Ohio Board of Regents staff if possible.

8. **Please contact an HEI representative immediately** at 614.466.5045 if you have reason to believe that HEI data has been lost, stolen or compromised in any way. Of particular importance is any data from the HEI system which personally identifies students, faculty, or staff. Also contact HEI if you believe your password has been compromised, or if you need a new password.

Data Access Policy

The Data Access policy is located on the Board of Regents website at http://www.regents.ohio.gov/hei/Policy.PDF.

Who determines access to the HEI system?
The HEI liaison, appointed by the president of each institution, has the responsibility to authorize data reporters to submit specific data files. Liaisons are a two-way information conduit between The Ohio Board of Regents staff and campus staff. They provide oversight to ensure that reporting is done accurately and on time and that the impact of changes to reporting data in one area is also understood by other campus data areas. HEI Liaisons can authorize access to HEI, modify data reporter information, request new HEI web accounts, and revoke user authorizations.

HEI Liaisons are listed on the HEI website at http://qry.regents.state.oh.us/cgi-pub/people_page_cgi?page=liaison

Obtaining new HEI User Accounts

The following procedures describe how data reporters obtain and use HEI Web accounts.

1. Data Reporters must read HEI Policies regarding Access to and Dissemination of HEI Restricted Data at http://regents.ohio.gov/hei/Policy.PDF.

2. The Data Reporters must submit a completed and signed copy of the HEI User Authorization Form available from their Liaison. The form is submitted to HEI staff.

3. The HEI liaison uses the Liaisons Only Web pages to authorize data reporters to submit specific data files.

4. An HEI staff person contacts each newly authorized data reporter to convey HEI web account information, including account name, initial password, and the list of files that the data reporter is authorized to submit.

If your institution is new to HEI reporting, contact HEI to setup a Liaison.

GETTING STARTED / HOW DO I SUBMIT MY DATA?

First, follow the instructions above in the Data Access section to get access from your HEI Liaison.

The Academic Calendar
Your academic calendar determines when files should be submitted. This step must be performed before files can be submitted to HEI. It need only be done once per year.

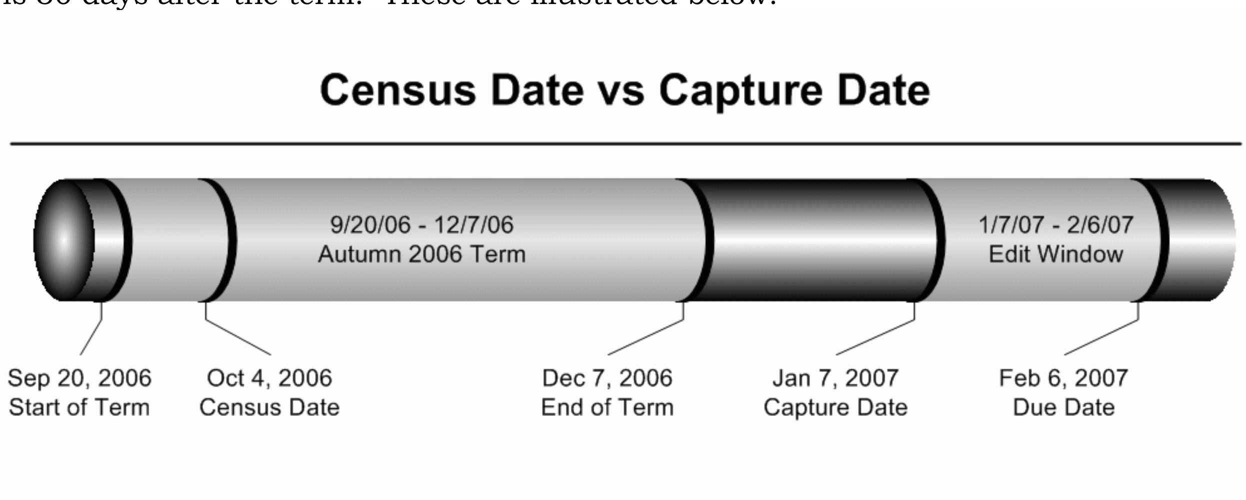
The data reporter designated as the academic calendar administrator (by the HEI Liaison) submits the start and end dates for the upcoming fiscal year plus two terms using the Academic Calendar page in the Restricted Outputs section of the HEI web site. If this information is not submitted, the start and end dates for files submissions will not be set in the HEI Data Input Site.

Edit Windows
The amount of time allowed to for submitting, editing, and correcting a file (known as the "edit window") varies from file to file, depending on the data elements within the file. (Specific data elements for each file are covered in the Data Submissions Document section of this guide). Academic calendars also determine edit windows.

File Submissions Schedule
The File Submissions Schedule is a query which can be accessed for each institution at http://qry.regents.state.oh.us/cgi-pub/subschedule. The Schedule Query is used to view the edit windows for each file as they apply to your academic calendar. The bottom line - There is a specified time period in which each file MUST be submitted.

Census Dates and Capture Dates

In the Data Submissions Document you will see information about the Census and Capture Dates. The Census Date is the date as of which the data is captured. The Capture Date is the date during which the data is pulled from your Information System. As a rule, the Census Date is the 15th day of the term, and the Capture Date is 30 days after the term. These are illustrated below.



For example, the Ohio State University Course Enrollment in Autumn 2006 will be collected from Jan 7, 2007 to February 6, 2007. This data will have a census date of October 4 (the 15th day of the term). This means the data is a snapshot of the Course Enrollment as of October 4. In this example, Ohio State has until the Capture Date to enter enrollment into their student information system. On the capture date they can start to report enrollment data to the Ohio Board of Regents by submitting data to the HEI system.

How do I create an HEI file?

Data Input Site

The Data Input Site manages HEI users, data, and error checking all in one location. The Data Input Site can import data via ASCII text files.

What is a Text File?

Text files are files that contain text only with no associated formatting. They are typically edited in simple applications such as Microsoft Windows Notepad, though they are handled by almost every text editor. The text files uploaded to the Data Input Site are a fixed width, so that data can be parsed from the files according to its location on a record line. For example in the following line, the first 4 characters (also called columns) are used to describe the school, the second 2 characters describe the file and the last 4 characters describe the year.

BGSUCN2006

Bowling Green State University (BGSU) is the school.
Course Enrollment (CN) is the file.
2006 is the year.

HEI data files follow this pattern of using columns for delimiting. These files are sometimes known as "flat files." See Wikipedia for more information about flat files: http://en.wikipedia.org/wiki/Flat_file_database#Flat_files.

HEI text files are made up of two pieces, the Header record and the Data. The Header record format is standard across all files. The format of the data for each of the text files is very explicitly defined in each file's Data Submission Document.

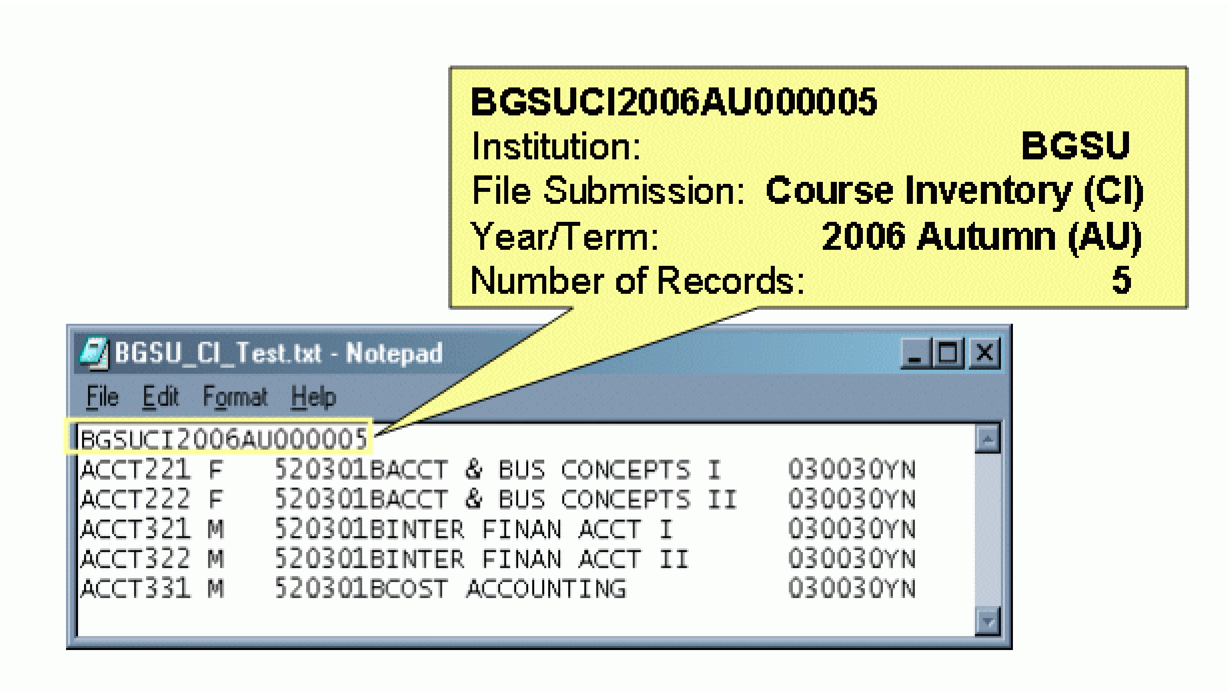
Note: Microsoft Word and other programs can save submission files in ".txt" format. Be sure to save files using this format. The native ".doc" format in MS Word cannot be interpreted by the HEI Data Input Site.

What is the Header Record and what does it look like?

The file Header Record provides information used in the processing of the data file. It must be the first record in all data files. Here is the HEI header format.

Field Name	Field Attributes and Procedures	Data Format
Institution	Enter an institution code from Institution/Campus Codes.	Alphabetic 4 characters Columns 1-4
File Identifier	Enter the two-letter abbreviation from the data area file listings to identify the file: Enrollment Facilities Faculty-Staff Financial SGS Financial Aid	Alphabetic 2 characters Columns 5-6
Year	In term-by-term submissions, enter the calendar year related to the term for which the data are being reported. In annual submissions that represent a fiscal year, enter the fiscal year which the data represent. In annual submissions that represent a particular day in a single term (e.g., the Physical Structure Inventory (PS), Area Inventory (AI), etc…), enter the year of the term which the data represent. In annual SGS financial aid submissions that represent an academic year, enter the terminal (second) year of the academic period which the data represent.	Numeric 4 characters Columns 7-10
Term	Enter the term for which data are being submitted. AU - Autumn term WI - Winter term SP - Spring term SM - Summer term NA - File is Annual or not submitted on a term basis	Alphabetic 2 characters Columns 11-12
Record Count	Enter the number of data records submitted (do not count the header record).	Numeric 6 characters Columns 13-18

File Header Record Examples



Example 1: BGSUCI2006AU000005 is the first record to be submitted in the Course Inventory (CI) file and shows that there are 5 records in this file for Bowling Green State University for the Autumn term, 2006.

Additional Examples

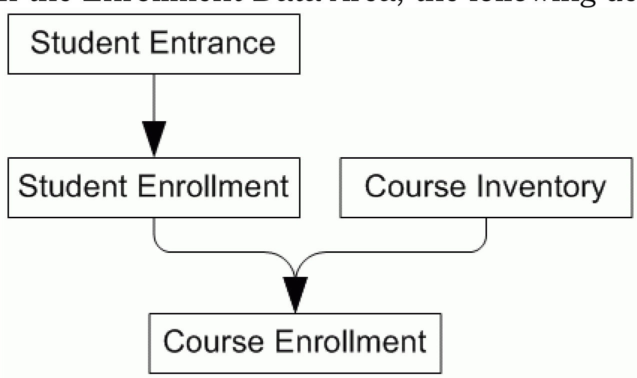
Example 2: WSUNAC1996WI000381 is the first record to be submitted in the Alternative Credit (AC) file and signifies that there are 381 records in this file for Wright State University for the winter term, 1996.

Example 3: OHSURE2001NA000897 is the first record to be submitted in the Research Challenge (RE) file and signifies that there are 897 records in the file for Ohio State University.

The Data Submissions Document

Each input file has a document which details its format called the Data Submissions Document (DSD). These documents are located in the data areas off of the HEI home page. Each DSD contains the following sections, describing important details about the specific file.

- The *File Description* section presents the type of information to be collected in the file.
- The *Submission Schedule* section indicates how often a particular file is to be submitted.
- As described in the Edit Window section of this guide, the *Capture Date* section is the point in time when the "snapshot" of institutional databases is to be taken. Relevant data effective as of that date are to be included in the file submission.
- The *Relationship to Other File Submissions* section describes which files need to be submitted before and after this file. These relationships create dependencies. For example, in the Enrollment Data Area, the following dependency exists:



  This means that the Student Entrance file must successfully load to the HEI database before the Student Enrollment file can be submitted. The Course Enrollment file requires the Course Inventory, the Student Enrollment and the Student Entrance files to be fully loaded before it can be submitted.

- The Data Fields section presents a table with descriptive information about the layout of input files and contains details about how input file records are to be reported.

Field Name	**Field Attributes and Procedures**	**Data Format**
Campus	Enter a campus code from Institution/Campus Codes.	Alphabetic 4 characters Columns 1-4
Student Identifier	Enter the federally assigned Social Security Number (SSN) whenever possible.	Numeric 9 characters Column 5-13
Low Credit Value	Enter the lowest credit hour	Numeric

	assigned to the course, expressed in tenths.	3 characters Columns 14-16

a) *Field Name* identifies the specific data element. The Field Name will be the same in different files when the data element being reported is identical in those files. For example, Campus is a field that appears in many files.

b) *Field Attributes and Procedures* presents the range of possible entries for the field and (when applicable) refers the data reporter to the proper verification table (see the Verification Tables section of this document).

c) *Data Format* describes whether the field is alphabetic, alphanumeric, or numeric. It specifies the number of characters in the field and it indicates the columns of the input file in which the data are reported. See the Data Formatting Conventions section of this document for more information.

- The *Additional Explanations* section provides further clarification of the reporting requirements associated with the file. In some file descriptions this section is omitted.

- The *Definitions and Descriptions of Data Elements* section provides additional definitions and descriptive examples. In some file descriptions this section is omitted

Data Formatting Conventions
Most fields require the entry of values that fill all character spaces allotted to that field. There are some fields, however, for which the entry will not completely fill the field. The following guidelines are the general rules for coding numeric and alphanumeric values that do not completely fill their fields. Any exception to these rules will be specifically noted in the data submissions documents.

Numeric Fields Indicating Quantity
When a value indicating quantity will not fill the field, right-justify the value and zero-fill the spaces to the left of the number. For example, if a value represents $405,982 and there are 10 character spaces in the field, it should be entered as "0000405982." Or if a value represents 3.5 credit hours and there are three character spaces in the field and the value is to be entered in tenths, it should be entered as "035."

Numeric Fields Indicating Negative Quantity
When a value indicating quantity is a negative number, enter a negative symbol (-) in the first character position (beginning from the left), right-justify the value, and zero-fill the spaces to the left of the number. For example, if a value represents negative $36,759 and there are 10 character spaces in the field, it should be entered as "-000036759."

Numeric Fields Indicating Identity
When a value indicating identity will not fill the field, left-justify the value and leave spaces to the right of the value blank. For example, if a Faculty Identifier is 777999

and there are nine character spaces in the field, it should be entered as "777999bbb" (b equals blank space).

Alphanumeric Fields
Alphanumeric fields are case sensitive and blank sensitive. For example, the following Course Identifier entries would be read differently:
Mathb101
Math101
MATHb101
MATH101
A blank must not appear in the left-most character of the field. When an entry has blanks as part of the value, left-justify the field.

A particular entry must appear exactly the same in all data files. For example, the Course Identifier must be identical in the Course Sections Taught (ST), Course Section Schedule (CS) Course Inventory (CI), Course Enrollment (CN), and Cross Registration (XR) files, and Off-campus Course Sections (OC), Flexibly Scheduled Course Sections (FS) lists.

Further Comments about the Data Section:
You should have zero lines following the last data line of your file.
There should be zero spaces following the last column specified by the Data Submissions Document.

Edit & Load Specifications

Edit and Load specifications document how an HEI program checks data for accuracy and stores data in the HEI database. File submissions include several accuracy checks, which are referred to collectively as *edits.*

With each file submission, HEI publishes a document which details the edit checks for a given file. For example, here are a few of the edit checks for the Course Inventory (CI) file.
If an error condition exists in the data, the edit codes and text messages appear to HEI users before a file is loaded into the HEI database.

Edit Code	Edit Text	Display Field
002	Course Identifier is blank or not left justified	Course Identifier
003	Subject Code is not in Subject Code verification table	Subject Code
005	Course Level Code is not in the Course Level verification table	Course Level
006	Low Credit Value is not numeric	Low Credit Value
007	High Credit Value is not numeric	High Credit Value
008	Low Credit Value is greater than High Credit Value	Low Credit Value/High Credit Value
013	The Delete Switch is not Y or N	Delete Switch
014	Course Identifier being deleted is not in the Course Inventory table	Course Identifier
015	There is already a record in this Course Inventory File submission for this course	Course Identifier
016	Eligible for Subsidy switch is not Y or N	Eligible for Subsidy Switch
019	Combination of Subject Code, Course Level and Institution are invalid	Subject Code/Course Level/Institution
020	Course Title is blank or is not left justified	Course Title

Summary of Changes Documents

Summary of Changes refers to changes to the design and programming logic in a file submission. These changes are documented as part of or as an addendum to the Data Submissions Document. For example, here is the Summary of Changes for the Course Inventory (CI) Data Submission:

Implementation Date	Description of Changes
September 1, 1998	Removed text referring to delete switch. Removed reference to beginning of production reporting. Removed reference to records submitted for the current term. Refer to the **Additional Questions Page** for clarification. Removed the text referring to the Subject Code/Course Level verification table under "Additional Explanations" section. Inserted text referring to the **Subject Code/Course Level/Campus** verification table. Removed text instructing data reporters to make two entries in a Course Inventory (CI) file for the same course, but at different levels under "Course Level" in "Definitions and Descriptions of Data Fields."

Verification Tables

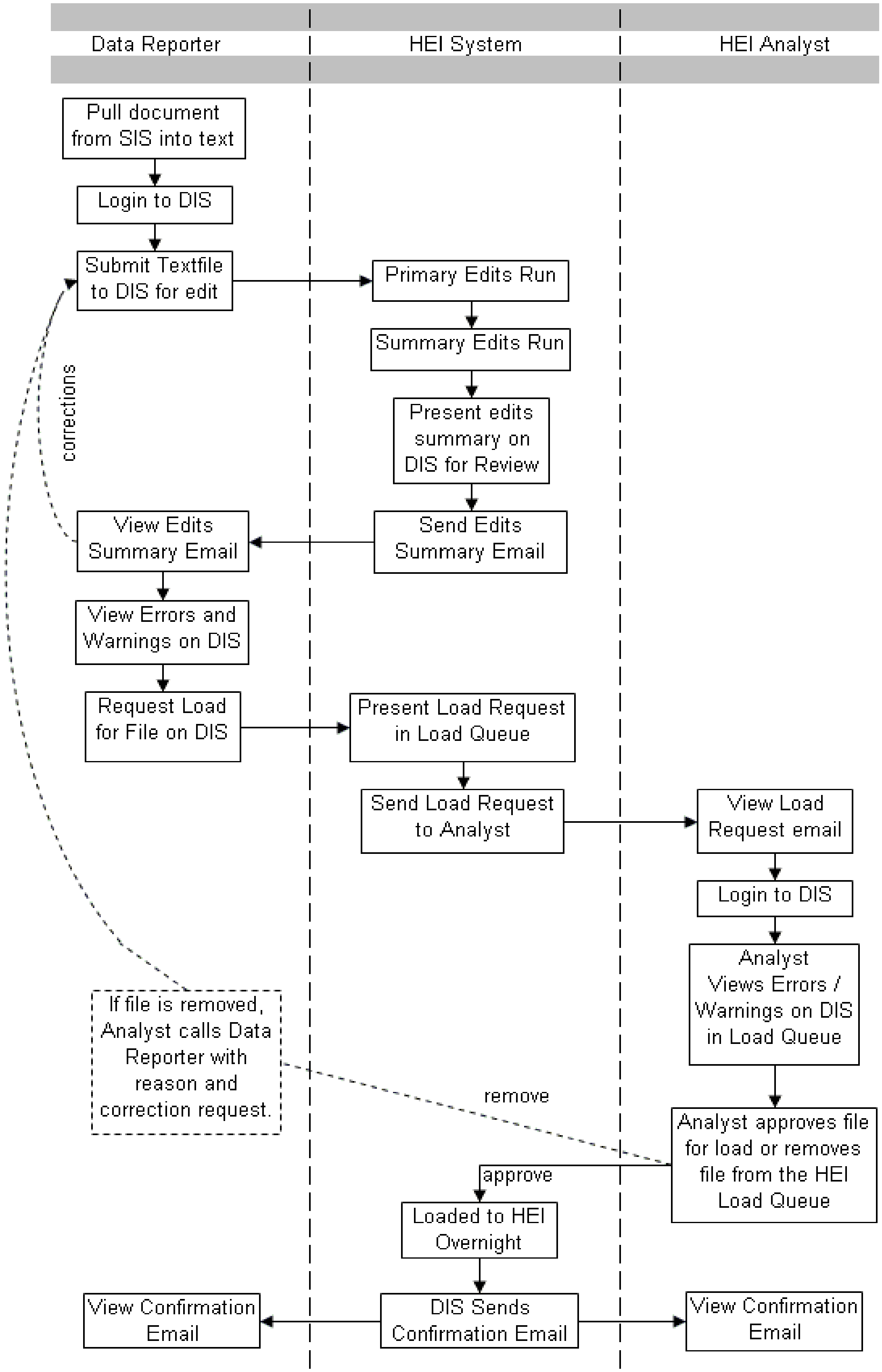
Verification tables are used to store lists of valid entries for fields in HEI data files. When a campus data reporter submits a file to HEI, the system compares the contents of particular data fields to the applicable verification tables. If this comparison shows that the contents of a data field are not in the verification table, the system displays an error or warning message.

The verification tables are dynamic. As time progresses, there will be minor modifications to the tables. It is recommended that data reporters occasionally check the HEI web site to be sure their working version of the verification table is current. To facilitate use of current versions, the List of Verification/Mapping Tables includes a revision date for each table.

There are two purposes for publishing verification table information via the HEI web site. The first purpose is to allow data reporters and other interested persons to simply view the current contents of the tables. The second purpose is to provide a method that enables campus data reporters and computer center staff to acquire complete copies of verification tables. Campus efforts to develop and maintain processes for building HEI data submissions are enhanced by this download capability.

The verification tables can be found at:
http://regents.ohio.gov/hei/datasubdoc/vertables/verintro.html. The tables are updated periodically. To ask questions or make comments concerning verification tables, contact a HEI representative at help-hei@regents.state.oh.us (614) 466-5045.

The Edit and Load Process

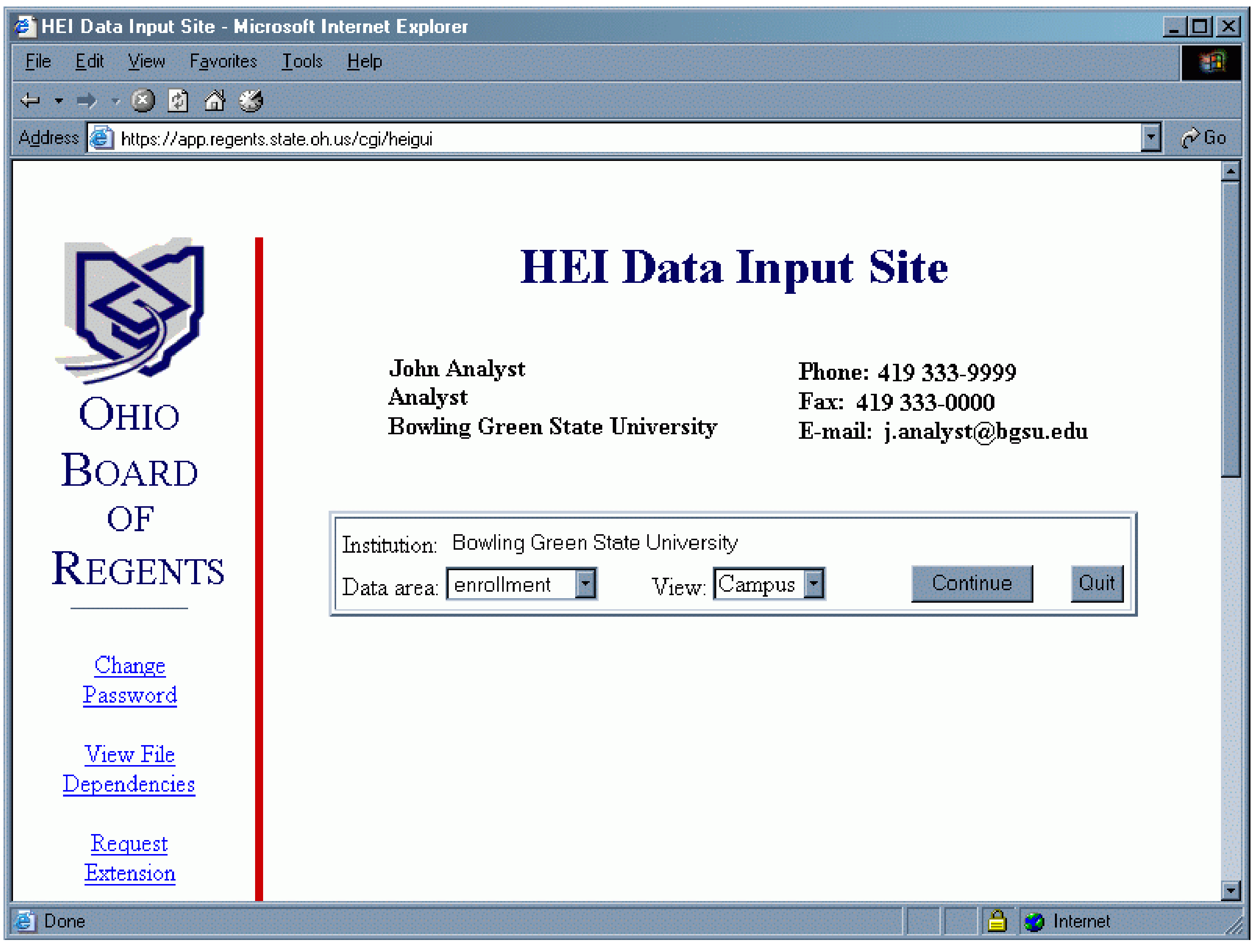


The first step in the diagram on page 21 indicates the Data Reporter must extract data from the campus student information system (SIS) into a text file. The Data Reporter also adds a header record and formats the data according to the appropriate Data Submissions Document. (Refer to the previous sections on the File Header and Data Submissions Document).

The following instructions are addressed to Data Reporters.

Save the ASCII text file with a header record and rows of data in a location easily accessible by your computer (For example, "My Documents" or "/home").

1. Login to the Data Input Site.
    1.1. Go to the HEI front page at http://www.regents.ohio.gov/hei/ and click "Data Input Site".
    1.2. Click the "Click here to continue" hyperlink.
    1.3. Read any informational messages displayed.
    1.4. Enter your username and password (obtained from your HEI Liaison), and click "OK."
    1.5. Click the "Click here to continue" hyperlink.
2. The next screen is the main screen of the Data Input Site.

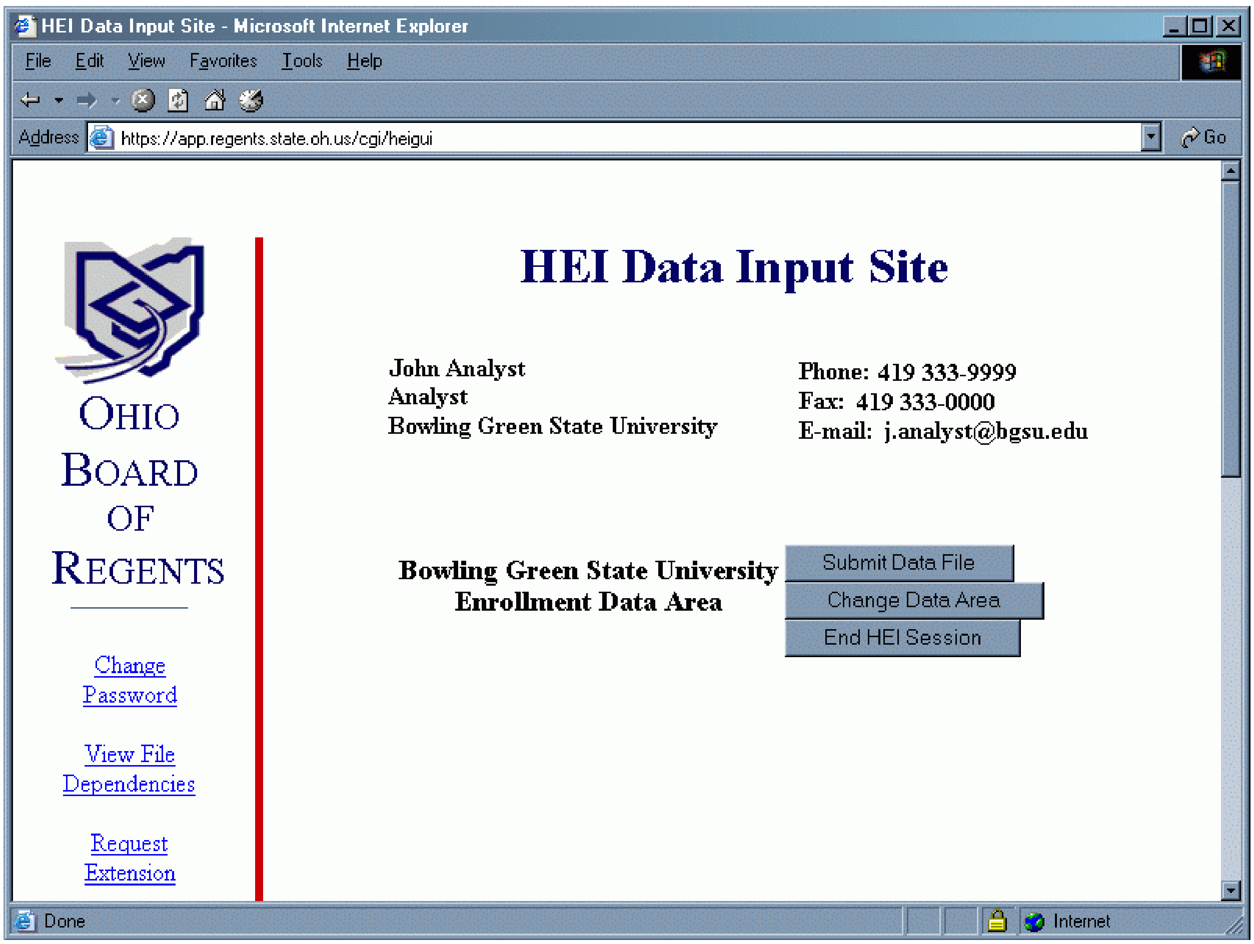


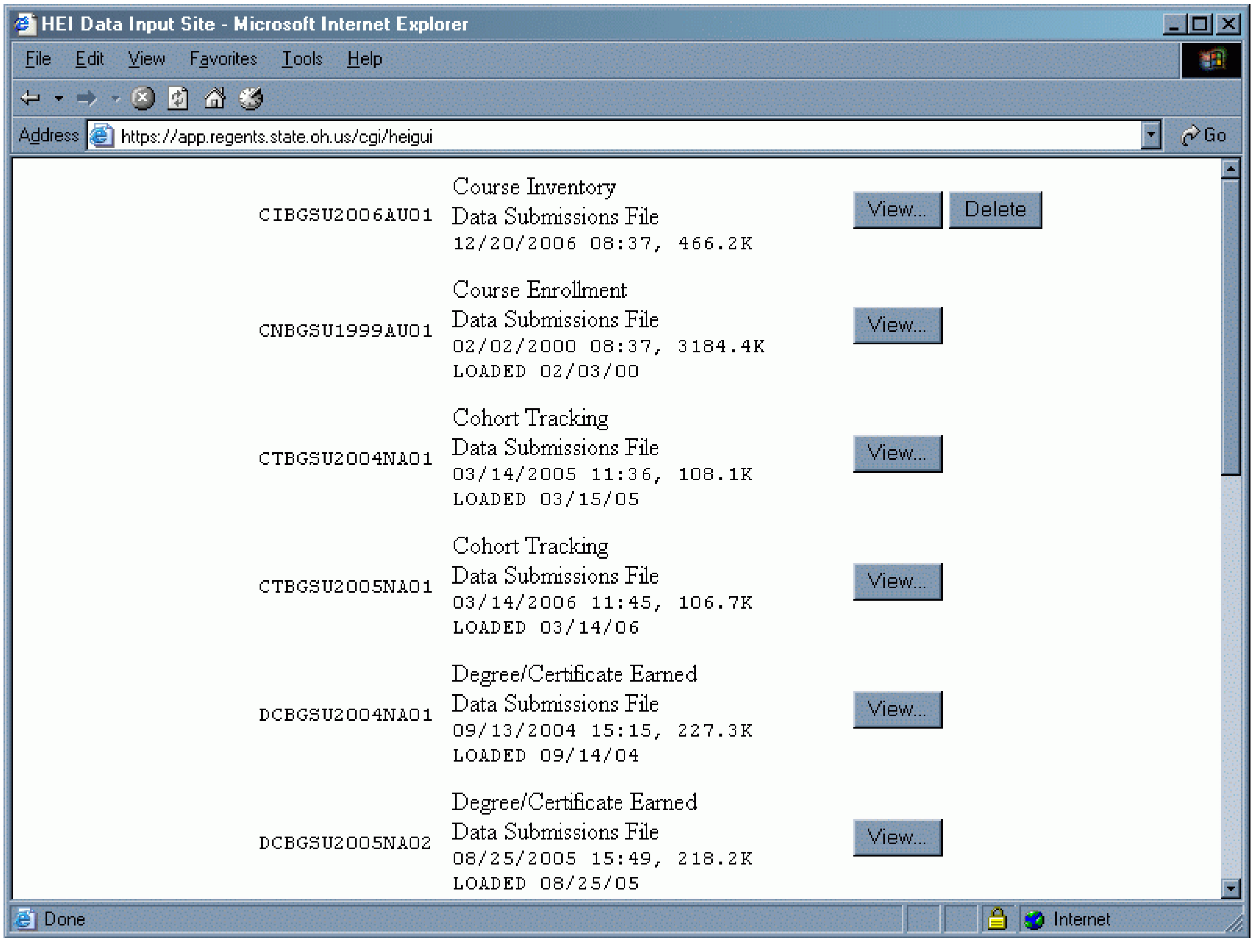
    2.1. On the left, you will see links to various applications available in the Data Input Site. In the main section, you can verify your contact information.

Please keep contact information current in order to ensure that you are successfully contacted when necessary.

2.2. Below the contact information is a box with your institution name, a selection for "Data Area" along with the "Continue" and "Quit" buttons. Select the "Data Area" of your file submission, and click "Continue".

3. You should now see a similar screen. This time, below your contact information, you will see three buttons beside your institution name.
   - The "Submit Data File" button allows you to submit a data file for this data area.
   - The "Change Data Area" button allows you to change to a different HEI Data Area.
   - The "End Session" button logs you out and closes the browser window.
4. If you scroll down the web page, you will see all the files that have been submitted for your institution in this data area (unless they have been archived).





4.1. The first column contains the file name which is created by:
- Submission Type (2 Letters)
- Institution (4 Letters)
- Year of Submission (4 Letters)
- Term of Submission (2 Letters)
- An iteration (2 numbers)

4.2. In the middle column, you will see these items:
- Submission Type
- Date and time of submission
- File size
- If the file was loaded, the word “LOADED” followed by the date.

4.3. The final column contains buttons to perform actions for each file
- “Request Load”
- “View”
- “Delete”

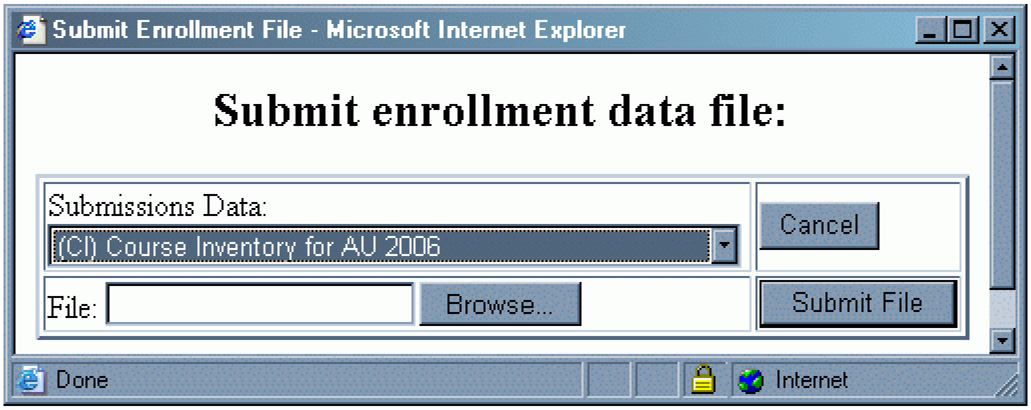
  (We will cover these functions further).

  Please note that HEI files are archived on the Data Input Site since 1998.

5. Use the Data Input Site to submit your file to HEI.

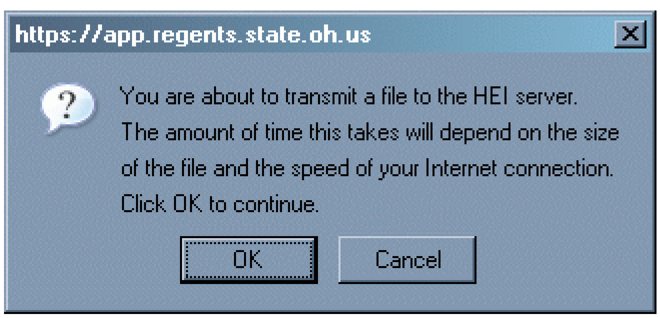
   5.1. Scroll back to the top of the page, and click the “Submit Data File” button.

   5.2. You will see a popup entitled “Submit ‘Data Area’ data file:”

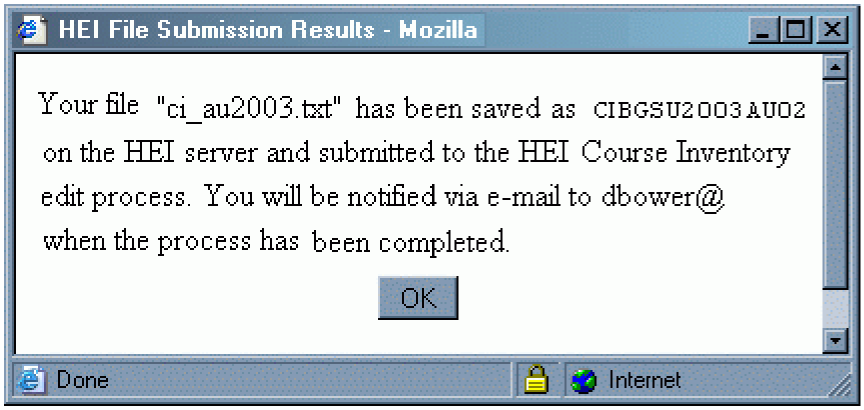


5.3. Select the file type, year and term that you are submitting from the "Submissions Data:" dropdown.
- These options are not in alphabetical order.
- You will only see file submissions for which the edit window is open.
- If you do not see a file, check your submission schedule, and then check with your HEI liaison to verify that you have permissions to submit the file.

5.4. You can click the "Cancel" button to exit the window without submitting.
5.5. Click the "Browse" button to browse to the location in which you saved your text file (For example, "My Documents" or "/home").
5.6. Click the ok button once you have selected your file.
5.7. Click the "Submit File" button to "Submit the file for Edits." This dialogue box appears.



Tip: If you receive an error, saying "Invalid Header Record," please verify that the file you are selecting in the "Submissions Data" dropdown menu matches the Header Record of the file you are submitting. Also check that your Header Record is formatted according to the Header Record specification.



5.8. You will receive a message with the HEI file name. In this example, it is CIBGSU2003AU02. Note the file name.

5.9. "Submitting the file for edits" means that you are uploading the file to HEI's system where the file will go through the edit process. This process checks your file for inconsistencies or errors.

5.9.1. There are 2 stages to the edit process called *Primary Edits* and *Summary Edits*.

- Primary Edits check your files validity against the Data Submission Documents and Verification Tables.
- Summary Edits run general tests against your file. For example, if all students have been entered as female, you will receive a warning that male students may be missing.
- Summary Edits will not run unless the "Primary Edits" finish with zero errors.

5.9.2. There are 2 types of messages that can be generated by the Edits.

5.9.2.1. *Errors* are critical messages that must be addressed. A file with errors can not be loaded. You will not see the "Request Load" button next to a file with errors.

Load Rule: **No Processing of Partial Files.** Note that files with errors are never partially loaded. Even in the case of a 1,000-record file that contains only one error, the correction must be submitted as part of a complete file. At this point in the process, no data have actually been loaded onto the database.

5.9.2.2. *Warnings* are informational messages that may or may not be acted upon. A file with warnings can be loaded. Be sure to verify records with warnings, as an analyst may call you to review and confirm the data.

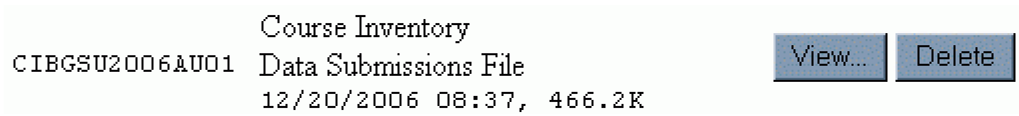
5.9.3. When the edits finish, the HEI system will send you an email with some quick statistics about the file. The email will contain the length of time the file took to edit, the number of records contained, the number of errors and the number of warnings.

5.10. There is a limit to the number of submissions you can make per file type per year and term. The limit is 99. You will receive a warning when you reach 45 and 80 submissions per file type.

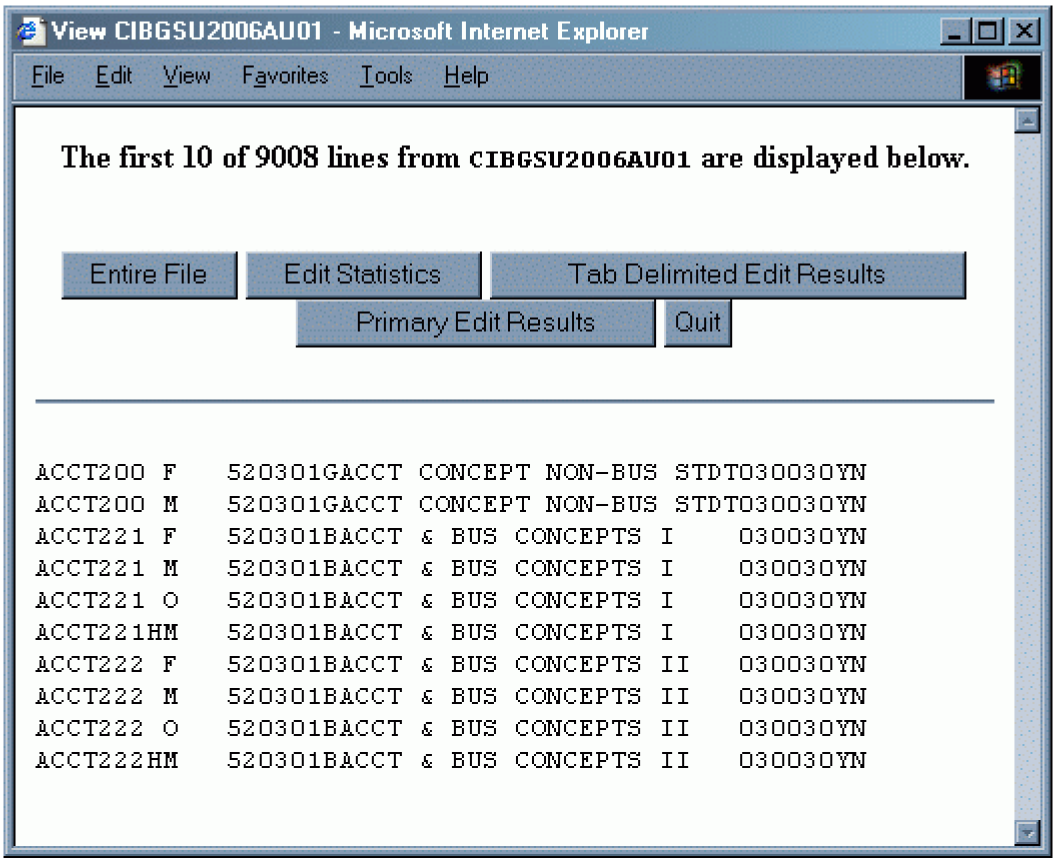
6. Once you receive a confirmation e-mail that the file has been submitted, go back to the Data Input Site to view further information about the file.

6.1. Go to the Data Input site.

6.2. Login to the Data Area of the file submission.
6.3. Scroll down the Data Area page.
6.4. Find the file name that you submitted to HEI in the list of files.

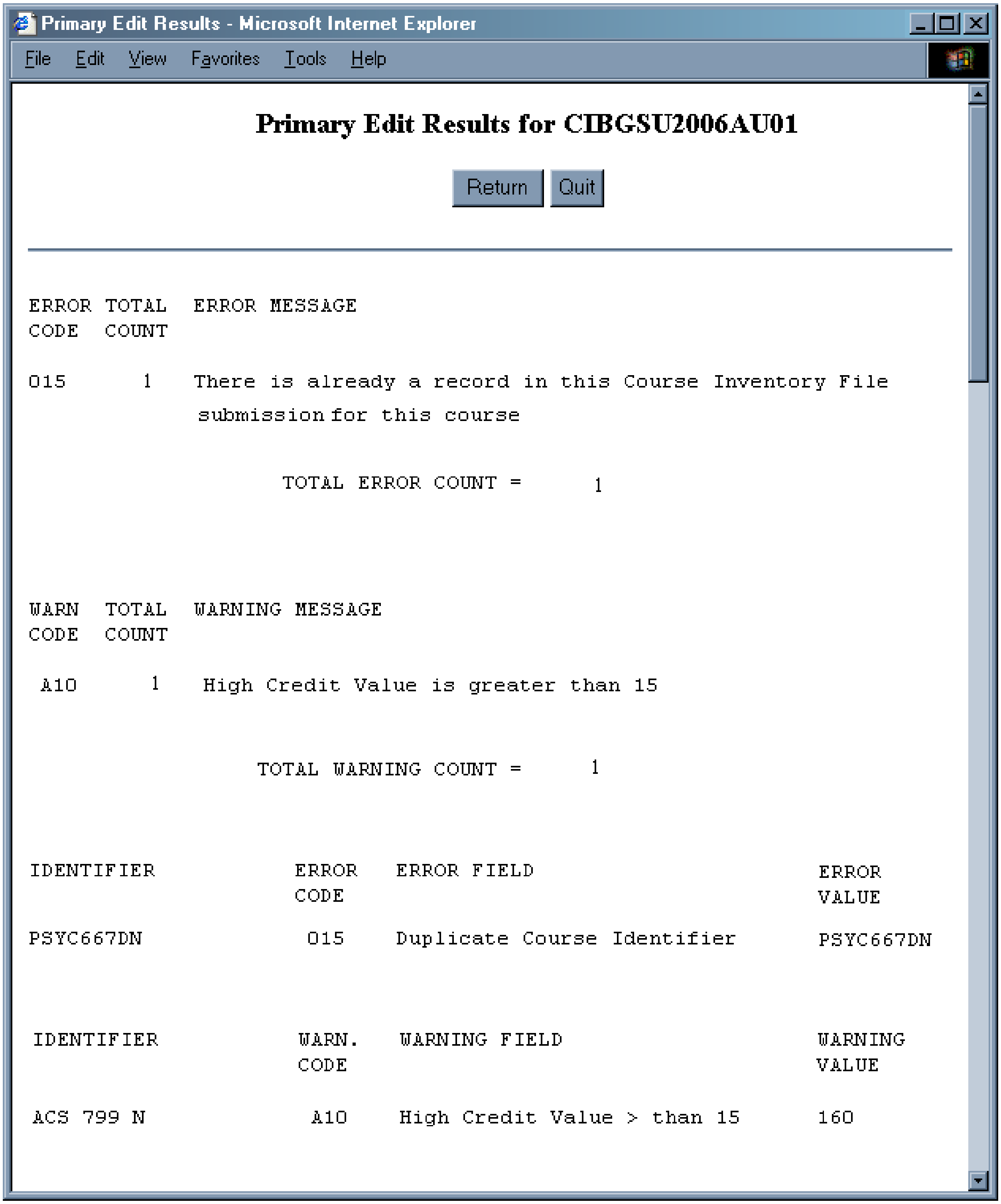


6.5. Click the "View" button.
6.6. The View button presents you with a screen with the first 10 lines of your file as well as 5 or 6 buttons.



- The "Entire file" button will return the data section of the file you submitted for edits without the header record.
- The "Edit Statistics" button will display a copy of the email sent to you in step 3 above.
- The "Primary Edit Results" button will display the results of the Primary Edits. (Explored in much further detail shortly).
- The "Tab Delimited Edit Results" button will display a copy of the Primary Edit Results in a format that can be edited with Microsoft Excel.
- When working with certain files, the "Summary Edit Results" button is available. This button will display the Summary Edits. This button only appears after all primary edits are successfully passed.

7. Click the “Primary Edit Results” button. The Primary Edit Results button displays with a screen divided into sections.



7.1. The top section contains a summary of the errors and warnings. Each error code and warning type has a message that informs you of how many times it occurred as well as a short description of the error or warning type.

7.2. The bottom section contains a line for each error and warning encountered. Each error or warning has a message that explains the error code. You can also look up more information on an error code by checking the Edit and Load Specifications. Each record is listed which generated the error or warning, along with a description of the error or warning, and the field which caused the message. If you have any errors, you must correct those errors in your file (Described below) using your Student Information System (SIS), and then resubmit your file for edits.

Tip: Remember to SAVE your file in your text editor after you make changes, and before you resubmit.

8. If you have zero errors, the “Summary Edits” button will appear for this file.
9. Click the “Summary Edits” button. The Summary Edits button presents you with various tables for you to verify the validity of your data.
10. When you have zero errors and your data is fully accurate, you may *Request Load* for the file. This means that you are certifying your data as complete and would like it to be approved for load that evening.
11. Go to the Data Input site.
12. Login to the data area of the file submission.
    - Scroll down the page.
    - Find the HEI file name of your Submission.
    - Click the “Request Load” button.
    - You will be prompted to confirm that you have read and agreed with the terms in the Request Load dialog box. This is your electronic signature certifying that the data is accurate.

13. Your file is then sent to the Load Queue for an HEI analyst to review.

14. The analyst will manually check your file. This will be done according to the System Availability Schedule given above. You will be contacted with a reason and a request for correction if there are any errors.

15. If your file is approved by the HEI analyst it will be loaded to the HEI database that evening. **Only at this step is your data inserted into the HEI database.**

16. The Data Input Site will send a load confirmation email to you, which is similar to the edit email. Look for this email to verify that your file successfully loaded. You can also verify your file successfully loaded by going back to the DIS, scrolling down to your file, and looking for the “Loaded” date.

CORRECTING ERRORS

There are two types of corrections that data reporters may need to make after locating errors in their files:

1. Correcting errors in data files prior to "Requesting Load."
2. Changes after the data files have been successfully loaded to the HEI database.

Corrections prior to the "Request Load"

Data reporters usually learn about problems in their data files when they view the results of the edit program. The edit program shows which records contain errors and which fields within the record are in error.

To correct errors identified by the edit program, the data reporter modifies their "local" copy of the entire text file by looking at the primary edit messages, and then resubmitting the corrected file for edits.

Corrections after a file is successfully loaded

Data Reporters sometimes find mistakes after their file has loaded to the database. If your Edit Window is still open, proceed with the following directions. If your Edit Window is closed, you must follow the instructions for "Requesting an Extension" before proceeding.

You will only need to submit deletion and replacement records when making corrections after a file has been loaded. You will not resubmit all of your data for that file.

There are several methods for correcting data which depend upon the file. You may use the *delete switch* to delete rows of data, or the *update* method to overwrite existing rows of data in the HEI database. The update feature is only available on certain files and is used only when modifying a data field that is not part of the *primary key* (see below). If the field you are modifying is part of the primary key, you must use the delete switch method to first remove data and then enter a new row of data.

The *primary key* can be thought of as the data fields which distinguish a record from all other records. See the Update table at http://regents.ohio.gov/hei/datasubdoc/general/update.html for details on how to delete rows of data or update rows of data for each HEI file submission, and details regarding which data fields comprise the primary key for each file. For more information about primary keys, see http://en.wikipedia.org/wiki/Primary_key

Updating Records Previously Loaded in the HEI Database

The update method allows campus data reporters to update information in a file that has been loaded onto the database without deleting dependent files and without deleting the original record. To update a field, create a new file submission that matches the primary key for each incorrect record in the database. (See http://regents.ohio.gov/hei/datasubdoc/general/update.html for primary key fields for each file). Along with the primary key fields, each row of data to be updated contains all fields referenced in the data submissions document for that file. The data fields are updated with the corrected information. The Delete Switch will be set to "N" (for No). After updating rows in the file submission with corrected data, resubmit the corrected file for edits. The HEI load program will update the incorrect data with the revised data.

Using the Delete Switch to Update Previously Submitted Records

In some cases, you will need to utilize the delete switch to correct records. There are two types of updates that will utilize the delete switch: modifying the primary key, and not modifying the primary key.

If you are modifying the primary key, simply create a new file according to the Data Submission Document, with the incorrect record(s) AND the correct record(s) in the same file. Set the incorrect record(s) delete switch to “Y”. Set the correct records delete switch to “N.” Now, submit the corrected file for edits. The incorrect records will be deleted, and the corrected records will be loaded into the HEI system.

Correcting Data using Two File Submissions

Some HEI files require that data be corrected in a two-step process requiring two file submissions. Generally, two file submissions are required if you are modifying fields that compose the primary key. For the first file, you will create a new file according to the Data Submission Document, with the incorrect record(s). Set the delete switches to “Y” (for Yes). Now, submit the file for edits. The incorrect records will be deleted once the file is loaded into the HEI system. For the second file, you will create a new file according to the Data Submissions Document with the correct record(s) in it. Set the delete switches to “N” (for “No”). Now, submit the corrected file for edits. The correct records will be loaded to the system.

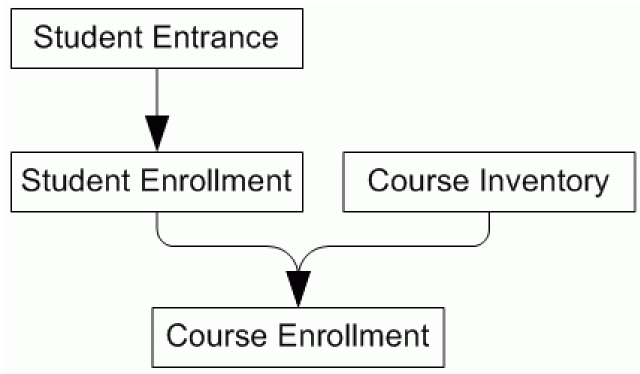
Order of Processing Corrections – Delete then Add

Some files support having both the deleted records and the replacement records in the same file; however the deletion record must appear before the replacement record. The deletions and replacements will be made when the file is loaded onto the HEI database.

Corrections with Dependencies

Corrections with file dependencies are handled in the same way as regular corrections. However, file dependencies dictate a specific order of processing files.

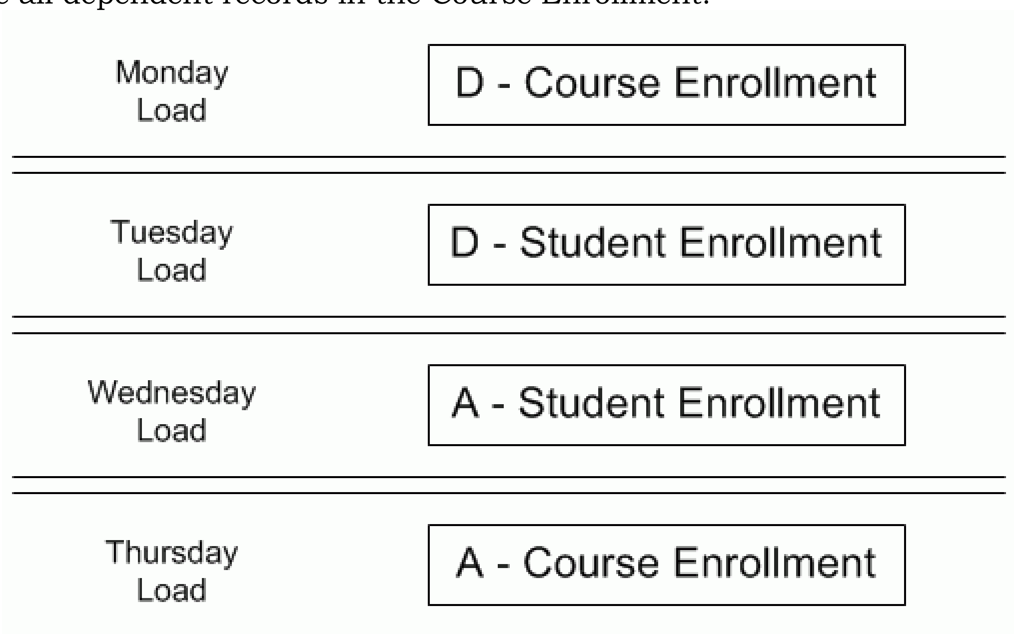
For example, in the Enrollment Data Area, the following dependency exists:



File Dependency means that the Student Entrance file must successfully load to the HEI database before the Student Enrollment file can be submitted. The Course Enrollment file requires the Course Inventory, the Student Enrollment and the Student Entrance files to be fully loaded before it can be submitted.

If a record is deleted or a primary key is modified, and a record in another file exists that depends on the record in the file with deleted or updated records, you will be prevented from making the change. You will need to remove the dependent record before you can modify the current record.

To use the Course Enrollment dependency from the Enrollment Data Area again, we see that in order to make a change to the Student Enrollment file, you must first remove all dependent records in the Course Enrollment.



On Monday, you will need to request load on a file which **D**eletes all course enrollments which are dependent on the student enrollment. On Tuesday, you would need to request load on a file which **D**eletes all affected student enrollment records. On Wednesday you would **A**dd the correct records, and on Thursday you would **A**dd the Course Enrollment records back.

Tips on Resolving File Submission Errors & Warnings

1. Review Primary and Summary Edits
2. Review the Data Submissions Document
3. Review the Edit & Load Specifications using the error or warning code
4. Compare your submission to previous submissions
5. Speak to your IT department, or whoever originally generated the data
6. SAVE changes to your file when you correct an error
7. Delete extra spaces at the end of a line or file
8. Contact an HEI Analyst (See the HEI contacts page at http://regents.ohio.gov/hei/people.php) if you are unable to resolve the errors or have questions about warning messages.

Frequently Asked Questions (FAQ)'s

Q: I received an email about errors. How do I know which record?
A: The file name is included in e-mails generated by the HEI system. For example, here is a sample e-mail with errors. The file name is NCBGSU2007NA01. Use the file name to find the file on the Data Input Site.

```
Edit Statistics for NCBGSU2007NA01

                      PRIMARY EDIT

                         run began at:  16:19:31 on 08/23/06

       total transaction records read = 00000009
               total number of errors = 00000006
             total number of warnings = 00000000
                   repeat submissions = 000000
```

Q: I just tried to load the same file twice. How will the HEI system respond?
A: Once you click the Load and OK buttons to request a load, a "lock" is placed on the file and an e-mail is generated to Ohio Board of Regents personnel. Here is a sample e-mail:

Load request from John Analyst at James A. Rhodes State College:

SELMTC2006AU01

Edit Statistics for SELMTC2006AU01

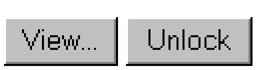
PRIMARY EDIT

Run began at: 13:14:58 on 01/25/07

total transaction records read = 1
total number of errors = 0
total number of warnings = 0
repeat submissions = 0

run ended at: 13:15:03 on 01/25/07

As long as the file has not yet loaded into the HEI database, you can unlock the file. Note the Unlock button.



Once the file is unlocked, you can edit the file again or press the Load button to request the file be loaded. When the file is loaded to the HEI database, the Data Input Site will indicate the file has been loaded with a message like this:

Data Submissions File
`02/20/2006 13:59, 0.0K`
`LOADED 02/20/06`

Once the file has loaded, you cannot unlock it. If you were to submit a duplicate file, the file would get a new file name such as SELMTC2006AU02, SELMTC2006AU03, SELMTC2006AU04, etc. The edit process would check the HEI system to see if duplicate records exist. For example, the Student Entrance (SE) file produces this edit message:

"There is already a record in the Student Entrance table for this student. The input record will be ignored."

Q: When I load one file, does that replace my previous submission?
A: Files are processed sequentially to add, update or delete records. Records which have already been loaded into the HEI database which are not updated or deleted will remain in the system as originally reported.

Q: What is a dependency?
A: A dependency is a relationship between file submissions which determines the order of processing. For example, a dependency exists between the Student Entrance (SE), Student Enrollment (SN), Course Inventory (CI), and Course Enrollment (CN) files. Files which do not have dependent relationships can be referred to as *Independent*.

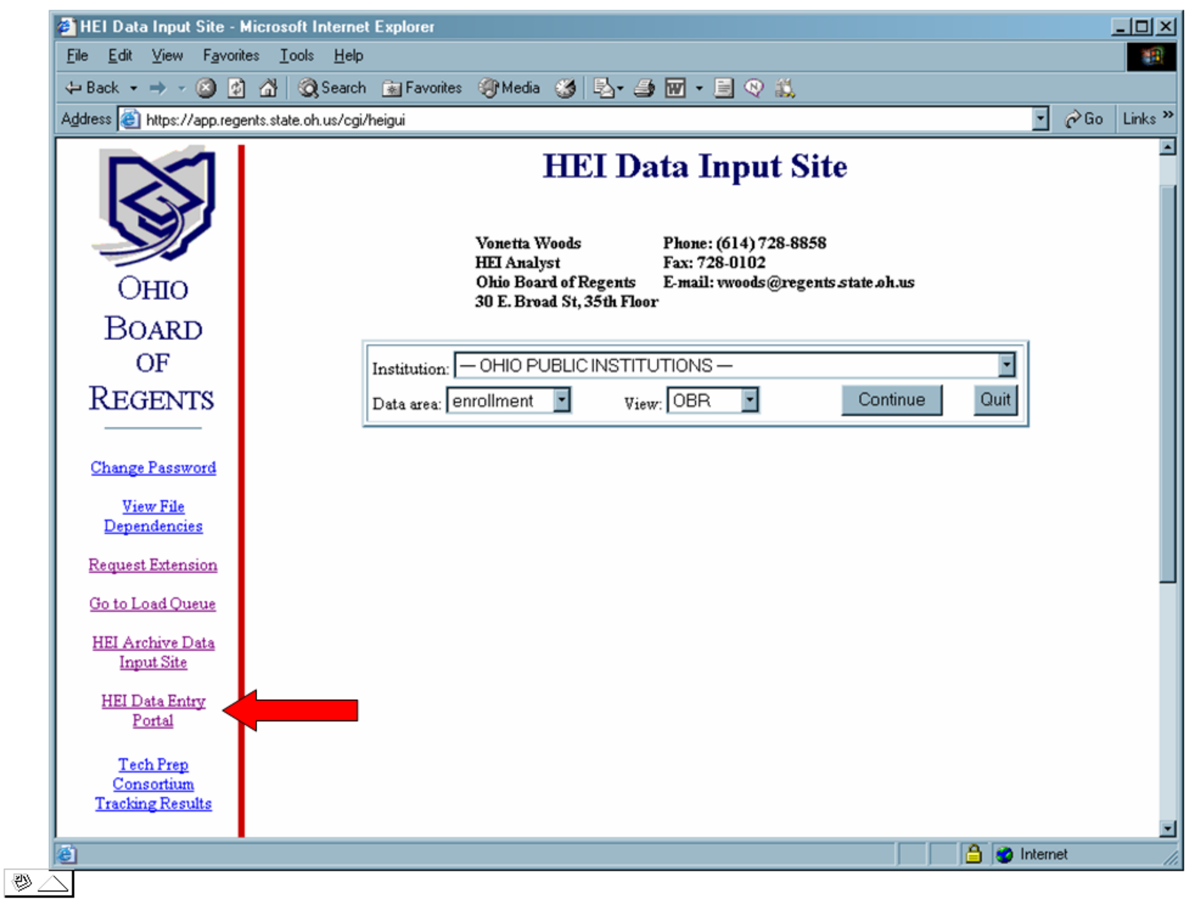
Data Entry Portal

Data may be submitted to HEI via the Data Entry Portal for a limited selection of files. The Data Entry portal allows the data reporter to enter individual records by typing the information directly onto a web page. As the data is entered into the Data Entry Portal, it is systematically grouped and saved into text files. After the data reporter finishes entering data into the Data Entry Portal and clicks the submit button, a file header record is created for the file and it is electronically submitted to HEI.

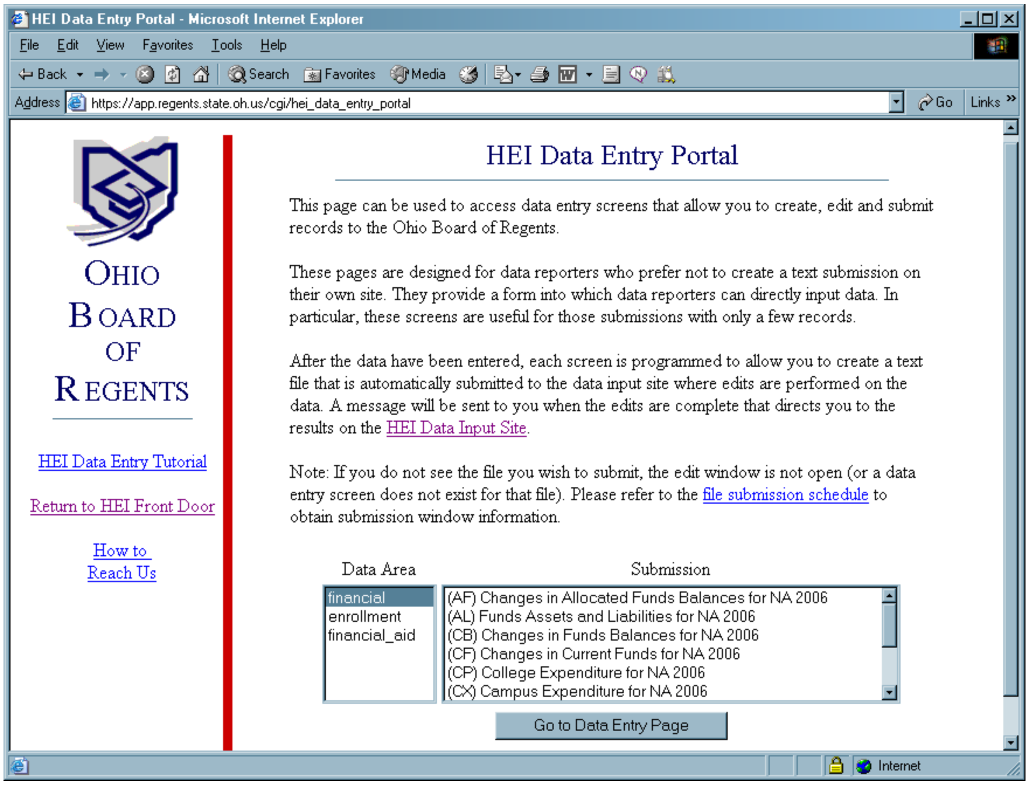
To access the HEI Data Entry Portal:

1. Login to the HEI Data Input Site.
    - 1.1 Visit the HEI front page at http://regents.ohio.gov/hei/index.php.
    - 1.2 Click "Data Input Site" under the Data Submission section.
    - 1.3 Click the "Click here to continue" hyperlink.
    - 1.4 Enter your HEI assigned username and password and click "OK"
    - 1.5 Read any informational messages displayed.
    - 1.6 Click the "Click here to continue" hyperlink.

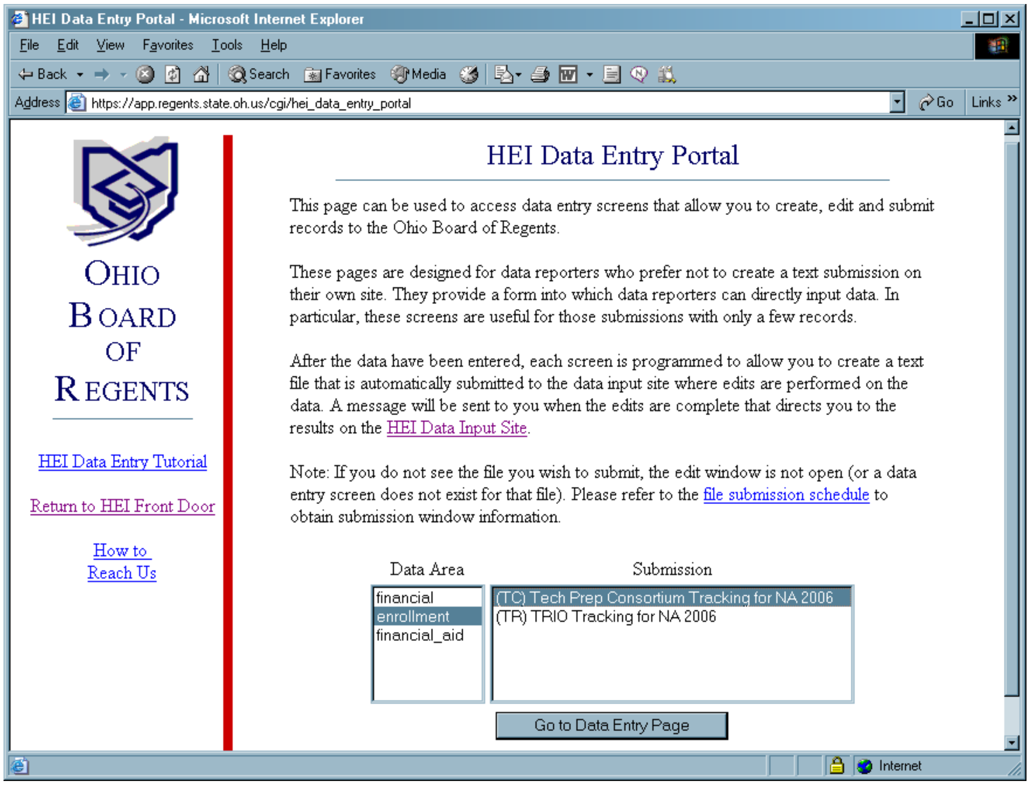
2. Select "HEI Data Entry Portal" from the Data Input Site's main menu.
    - 2.1 The HEI Data Input Site contains a menu of links to relevant applications along with the user's contact information, institution, and designated data area. Verify the accuracy of your contact information to ensure your receipt of important notifications and information.



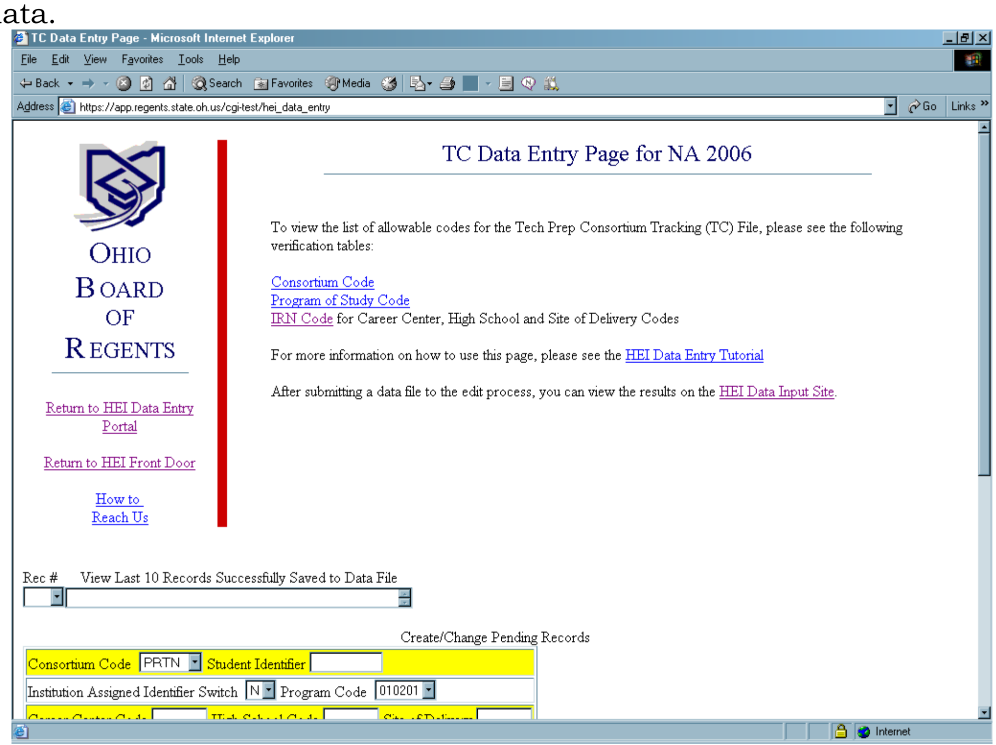
3. HEI Data Entry Portal.
   3.1. The HEI Data Entry Portal provides a listing of only those files for which you have authorization to submit. A menu of helpful links is also provided.

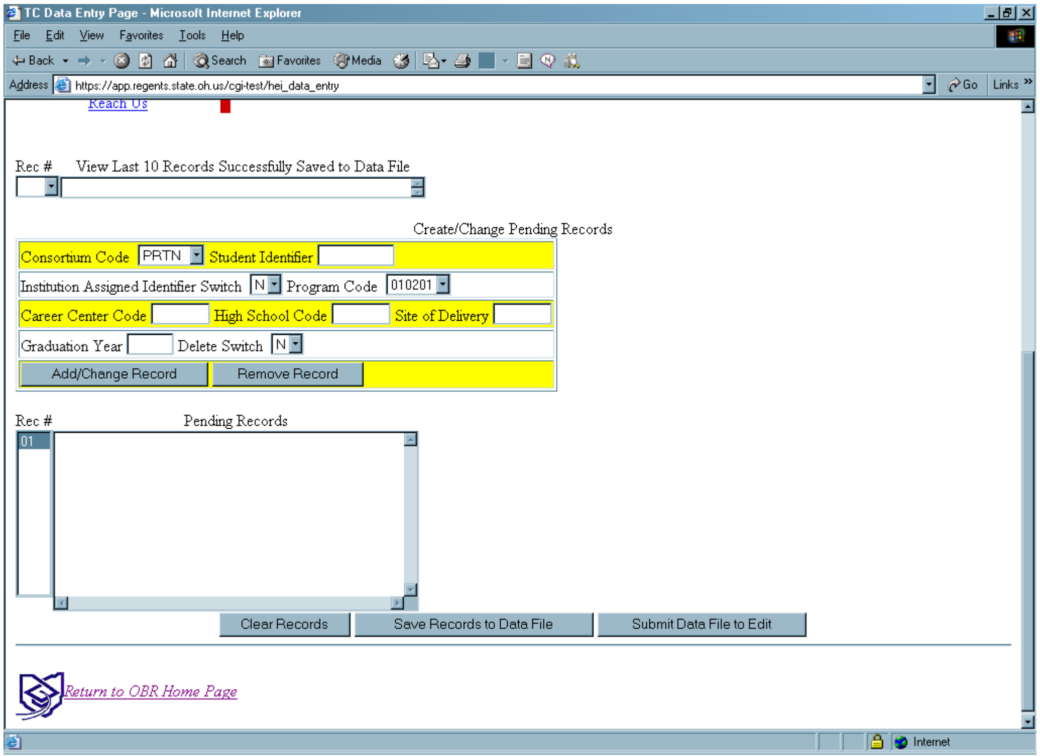


4. HEI Data Entry Portal File Selection.
   4.1. Select the Data Area for which you are trying to submit a data file.
   4.2. Select the file name from the Submission menu.
   4.3. Click “Go to Data Entry Page.”



5. HEI Data Entry Page Information.
   5.1. At the top of Data Entry Page are pertinent links and information that will aide in the data submissions process.
   5.2. At the bottom of the Data Entry Page are the data entry boxes for entering data.





6. Using the HEI Data Entry Page.

   6.1. After keying all the necessary fields for an individual record, click the "Add/Change Record" button. This stores the record in your browser and displays it in the area labeled "Pending Records." Repeat for additional records. If you would like to modify a record in the "Pending Records" section; select the record number from the "Rec #" box located to the left of "Pending Records", change the relevant fields using the data entry boxes, and then click the "Add/Change Record" button.

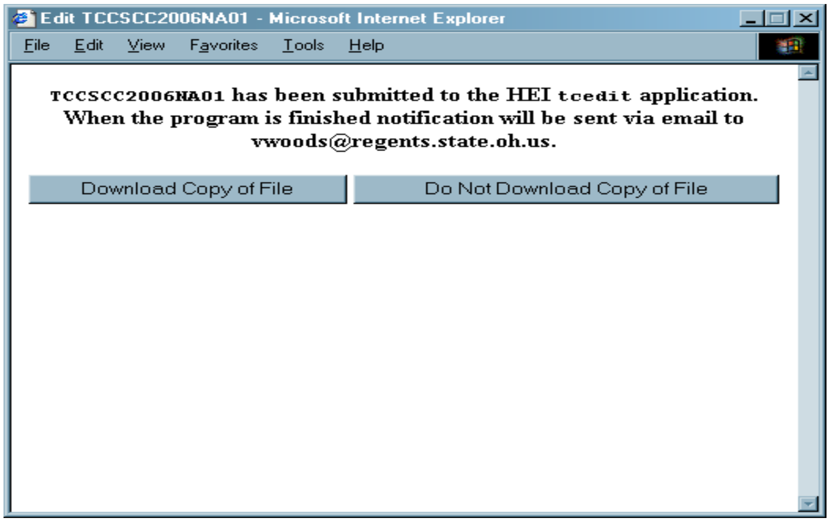
      Tip: Unsaved records are only stored in your browser and will disappear if you close your browser without saving them.

   6.2. To remove records from your selection or delete an unsaved record, click the "Remove Records" button.

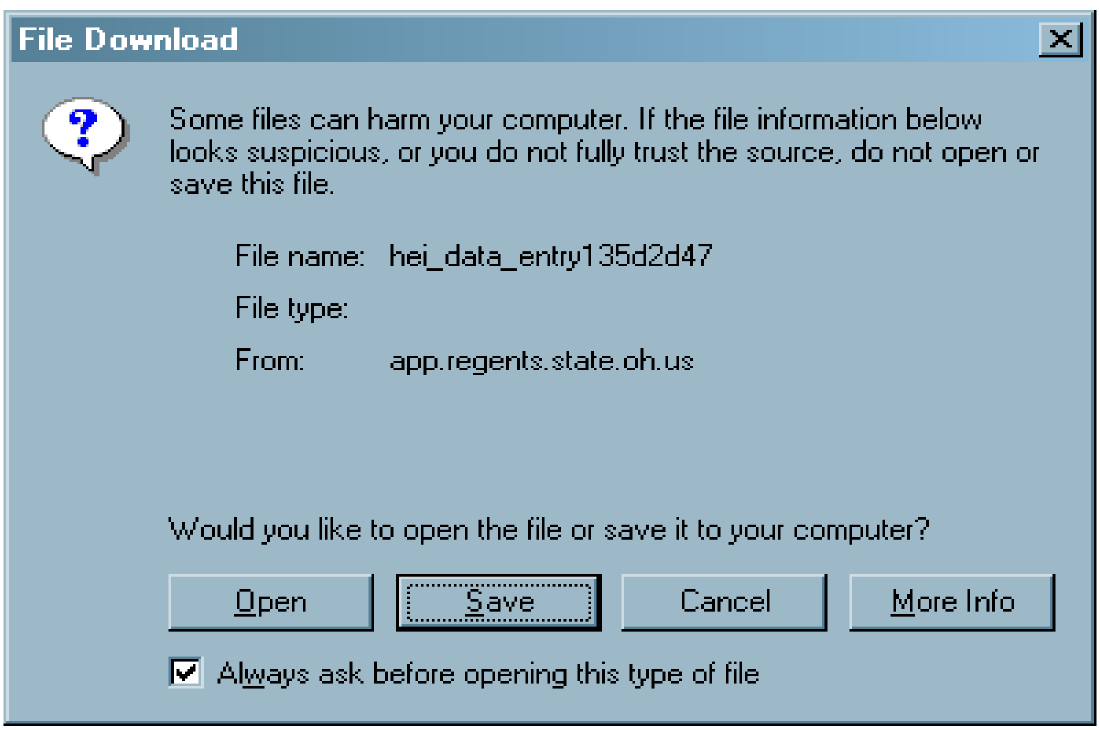
   6.3. After entering a batch of records (up to a maximum of 10), click the "Save Records to Data File" button. This allows you to save your work so that you can return to it later and either enter more records or submit it to HEI. Please note that once you have saved a record, you cannot change it using the Data Entry Page.

   6.4. Once you have entered all of the records in your file, you now must submit the file for edits. To perform system edits against all the records in your file, click the "Submit Data File to Edit" button.

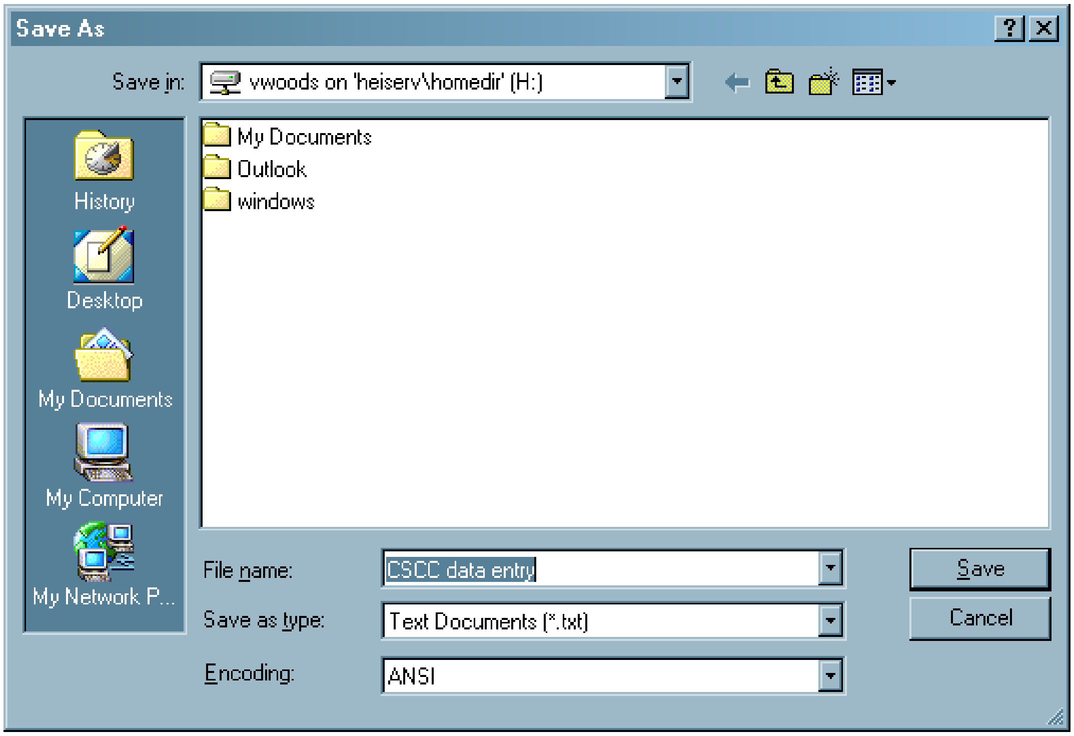
6.5. You are now given a 14 character file name along with the option of whether or not to download a copy of the file to your PC. Take note of the file's name as you will use it to reference your file on the Data Input Site. All fields for all records in a file must pass the edits in order for HEI to process it, so it is highly recommended that you save a copy in case the file does not pass the edits and you need to re-edit and resubmit it.



6.6. If you select "Download Copy of File", you will be prompted to continue. Select, "Save".



6.7. Be sure to save the record as a text (.txt) file. You should also note the directory into which you are saving the file.



6.8. Visit the Data Input Site to view your file's edit results. Any additions or corrections must be submitted in a subsequent file via the Data Input Site. For information on data file submission, viewing data files, or correcting data files via the Data Input Site, please refer to pages 19 thru 30.

Automatically Generated Emails

The HEI system automatically generates e-mail notices to remind you of submission dates. System-generated e-mails do not take into account any requests for extensions of edit windows. If you believe you have received a system-generated e-mail in error, please contact HEI. These emails are generated based on your permissions and academic calendar. Here is an example of a system-generated e-mail:

> This message is to remind you that the edit window for SM 2006 closed on 11/02/06. Our records indicate that you have not finalized end of term. The following files are required for end of term processing but have not been loaded. Please note that your school may not submit all of these files.
>
> CN, SN, SE, ST
>
> Additionally the following files have not been loaded. Please submit all necessary files and complete the finalize end of term process. Circumstances or the file type may indicate that it is not necessary for your institution to submit all of the listed files for this year and term.
>
> FS, OC, XR, AC
>
> Please submit these files and complete the finalize end of term process.
>
> Please contact the HEI Enrollment Team at (614) 466-5045 or hei-enrollment@regents.state.oh.us if you have any questions or need assistance.
>
> ***This is an automated email sent by the HEI system. Please do not respond to this email.

Short Tutorials

Using Microsoft Excel to Produce HEI Compatible Submission Files

To use Excel or Access to produce HEI compatible file submissions, please follow these procedures.

Let's begin with a typical record description for a Course Enrollment (CN) file:

Field Names	Field Attributes and Procedures	Data Format
Campus	Enter a campus code from Institution/Campus Codes.	Alphabetic 4 characters Columns 1-4
Student Identifier	Enter the federally assigned Social Security Number (SSN) whenever possible. If the SSN is unavailable, enter another identifier which uniquely relates to this student. For a given student, the same identifier must be used in all enrollment files.	Alphanumeric 9 characters Columns 5-13 Left justify
Course Identifier	Enter the permanent identifier assigned by the institution which distinguishes this course from all others offered by the institution.	Alphanumeric 12 characters Columns 14-25 Left justify
Section Identifier	Enter the identifier assigned by the institution which, in a given term, distinguishes among one or more sections, classes, or offerings of the same course.	Alphanumeric 6 characters Columns 26-31 Left justify
Credit Hours	Enter the credit hour value of this course enrollment, expressed in tenths.	Numeric 3 characters Columns 32-34
Attempt for Academic Credit	Enter a code from Attempt for Academic Credit Codes describing the student's status in regard to the attempt for academic credit through this course enrollment.	Alphabetic 1 character Column 35
Award of Academic Credit	Enter Y if the student earned academic credit for this course. Enter N if otherwise, including all instances when the Attempt for Academic Credit field is either A or C.	Alphabetic 1 character Column 36
Delete Switch	Enter Y if the record is to be deleted from the database. Otherwise, enter N.	Alphabetic 1 character Column 37

Turn it on the side to see the "real" layout:

Campus	**Student Identifier**	**Course Identifier**	**Section Identifier**	**Credit Hours**	**Attempt for Academic Credit**	**Award of Academic Credit**	**Delete Switch**
4 Characters (normally uppercase letters)	9 Characters (normally SSN)	12 Characters	6 Characters	3-digit number	1 Character	1 Character (Y or N)	1 Character (Y or N)

So, a short CN upload file will look like this

KENTCN1997AU000006

KENT123456789Course_Id_1 Sect1050YYN
KENT123456789Course_Id_2 Sect 2035YYN
KENT000004564Course_Id_1 Sect 2050YYN
KENT333322666Course_Id_3 Sect_1004YYN
KENT222265999Course_Id_5 Sect_1001YYY
KENT123456789Course_Id_1 Sect_2050YYN

The real question is: How do you convert data rows in an Excel spreadsheet into the above? Things to note:

Column A looks good, all the text data has the same number of characters.
Columns B and E are numeric data, not alphanumeric.
Columns C and D look good

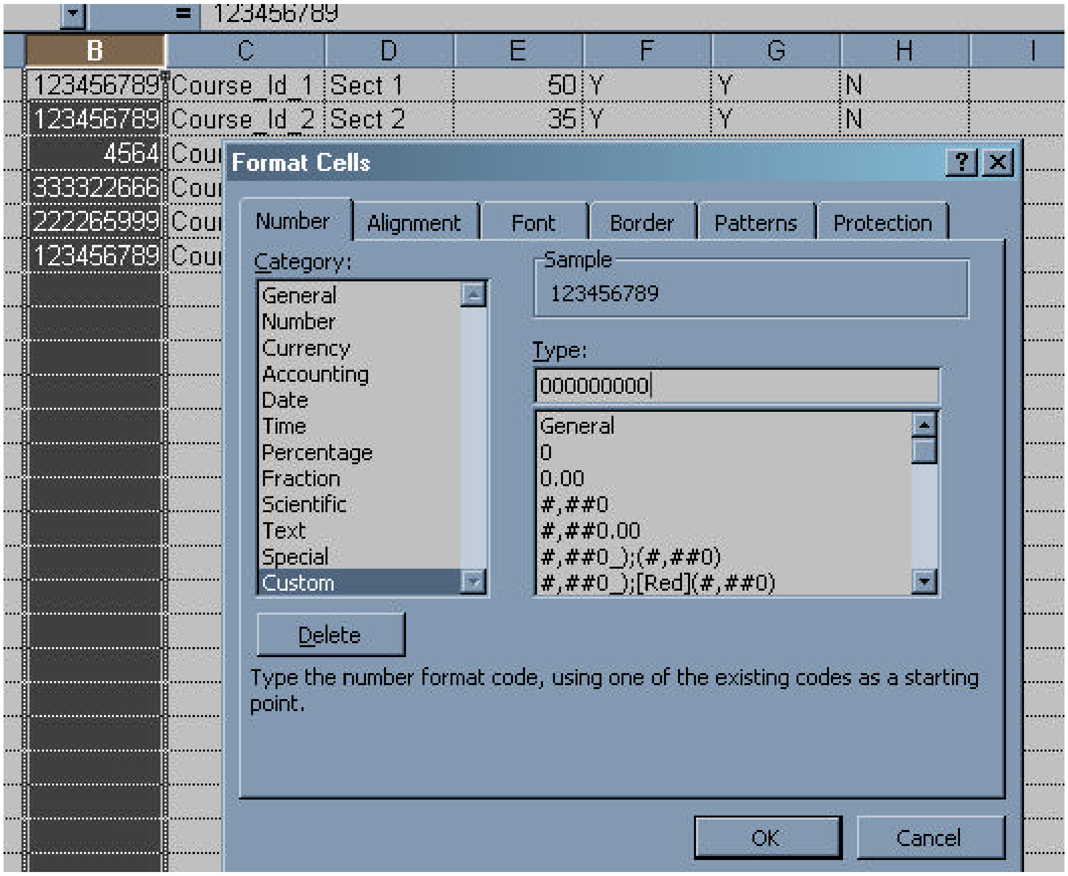
D14

	A	B	C	D	E	F	G	H
1	KENT	123456789	Course_Id_1	Sect 1	50	Y	Y	N
2	KENT	123456789	Course_Id_2	Sect 2	35	Y	Y	N
3	KENT	4564	Course_Id_1	Sect 2	50	Y	Y	N
4	KENT	333322666	Course_Id_3	Sect_1	4	Y	Y	N
5	KENT	222265999	Course_Id_5	Sect_1	1	Y	Y	Y
6	KENT	123456789	Course_Id_1	Sect_2	50	Y	Y	N
7								

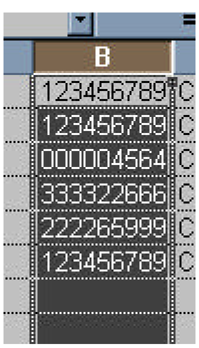
The trickiest part to using Excel is preventing it from stripping off leading zeroes from numbers. To ensure the data has the correct number of characters we must use the format cells feature.

1) Select the Column you need to fix by clicking on the label ("B" in our case).
2) Then choose the Format|Cells menu.
3) Click on the "Number" tab to bring it to the front.
4) In the category box choose "Custom".

5) In the “Type” box enter a zero for each character for the width of the field.
6) Click on “OK” to assign the format to the column. For example, column B (student identifier) should be 9 characters wide. So in this example we enter 9 zeroes in the “Type” box.



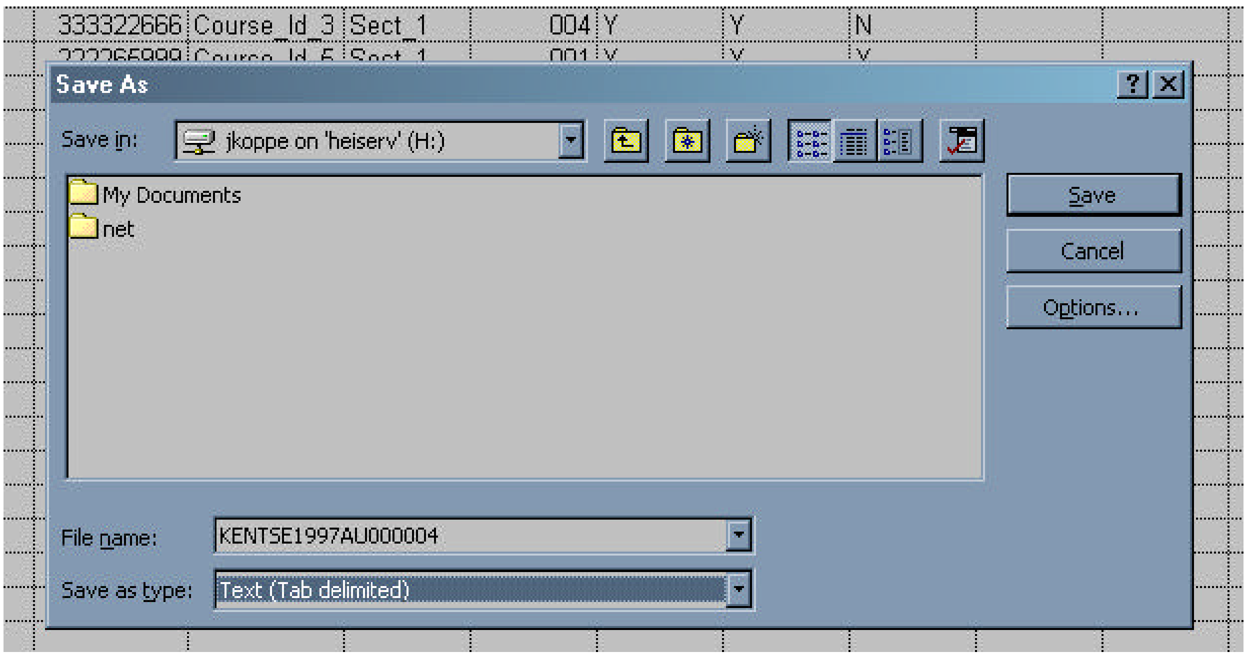
The column will now show the proper formatting:



Perform the same operation on all numeric columns to ensure that they contain the proper number of digits.

	A	B	C	D	E	F	G	H
1	KENT	123456789	Course_Id_1	Sect 1	050	Y	Y	N
2	KENT	123456789	Course_Id_2	Sect 2	035	Y	Y	N
3	KENT	000004564	Course_Id_1	Sect 2	050	Y	Y	N
4	KENT	333322666	Course_Id_3	Sect 1	004	Y	Y	N
5	KENT	222265999	Course_Id_5	Sect 1	001	Y	Y	Y
6	KENT	123456789	Course_Id_1	Sect 2	050	Y	Y	N
7								

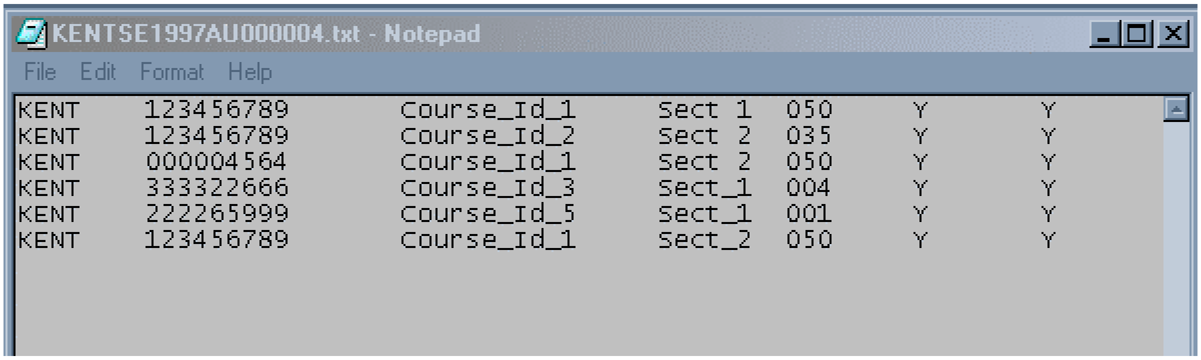
The next step is to export the data into a text file. Choose File|Save As. Choose "Text (Tab delimited)" in the "Save as type" selection box. Click "Save". If necessary, you may need to give the file name a ".txt" extension, i.e., KENTSE1997AU000004.TXT



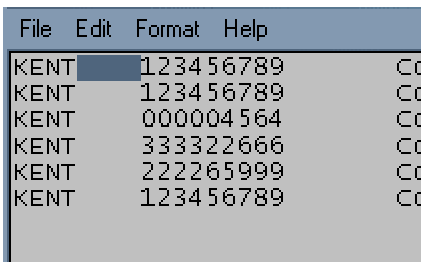
Unfortunately, this is still not quite what we need for submission to HEI. Excel does not possess the ability to export true fixed width records. So, we created a tab-delimited file by placing an invisible tab character between the data columns. In order to finalized the file for HEI submission we need to remove these invisible characters.

You now need to make a choice. If the submission file contains variable length text fields (e.g., names, addresses, etc.), or embedded spaces as fields, you'll need to ensure that these fields contain the proper number of spaces so that all the fields contain the same number of characters. Excel offers no way to make these corrections. If it is a small submission file you may want to do this in MS Notepad by simply inserting spaces in the required fields. However, this method is not practical for large files and you'll need to use MS Access to make these corrections.

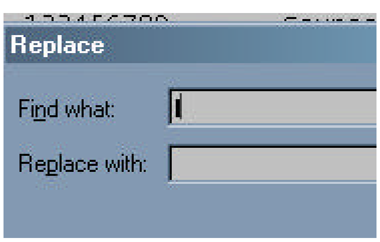
If your submission file does not contain variable length text data you can use MS Notepad to remove the tab characters and add the header record. To do so, open Notepad (Start|Programs|Accessories|Notepad) and open the file. (Notepad is often the default Windows editor for .txt files. You may be able to simply double-click on the file to open it in Notepad.) Notice the spacing caused by the invisible tab characters:



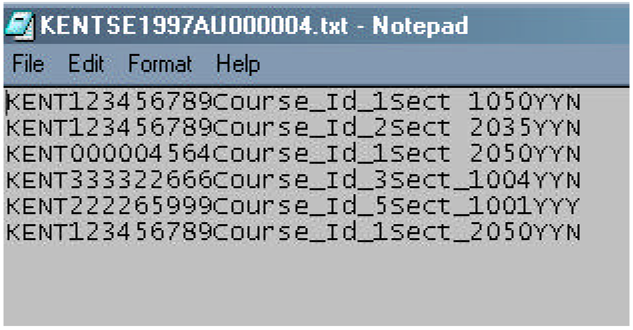
Using the mouse, select one of the tabs.



Then, select Edit|Copy to copy the tab to the clipboard, or press the Ctrl+c keys (referred to as “Control-C). Then, select Edit|Replace to bring up the Replace dialogue box. Click once on the “Find what” box. Then press the Cntl+v keys (referred to as “Control-V”) to insert the tab character. Since there is no visible character for the tab, Notepad will display a single heavy black vertical line to indicate that the tab character is in the box.



Make sure that the “Replace with:” box is empty. Double check to ensure that it does not contain any non-visible space characters. Triple check it! Click on “Replace All”. You will instantly see that all the tab characters have been removed from the text.




```
KENT123456789Course_Id_1Sect 1050YYN
KENT123456789Course_Id_2Sect 2035YYN
KENT000004564Course_Id_1Sect 2050YYN
KENT333322666Course_Id_3Sect_1004YYN
KENT222265999Course_Id_5Sect_1001YYY
KENT123456789Course_Id_1Sect_2050YYN
```

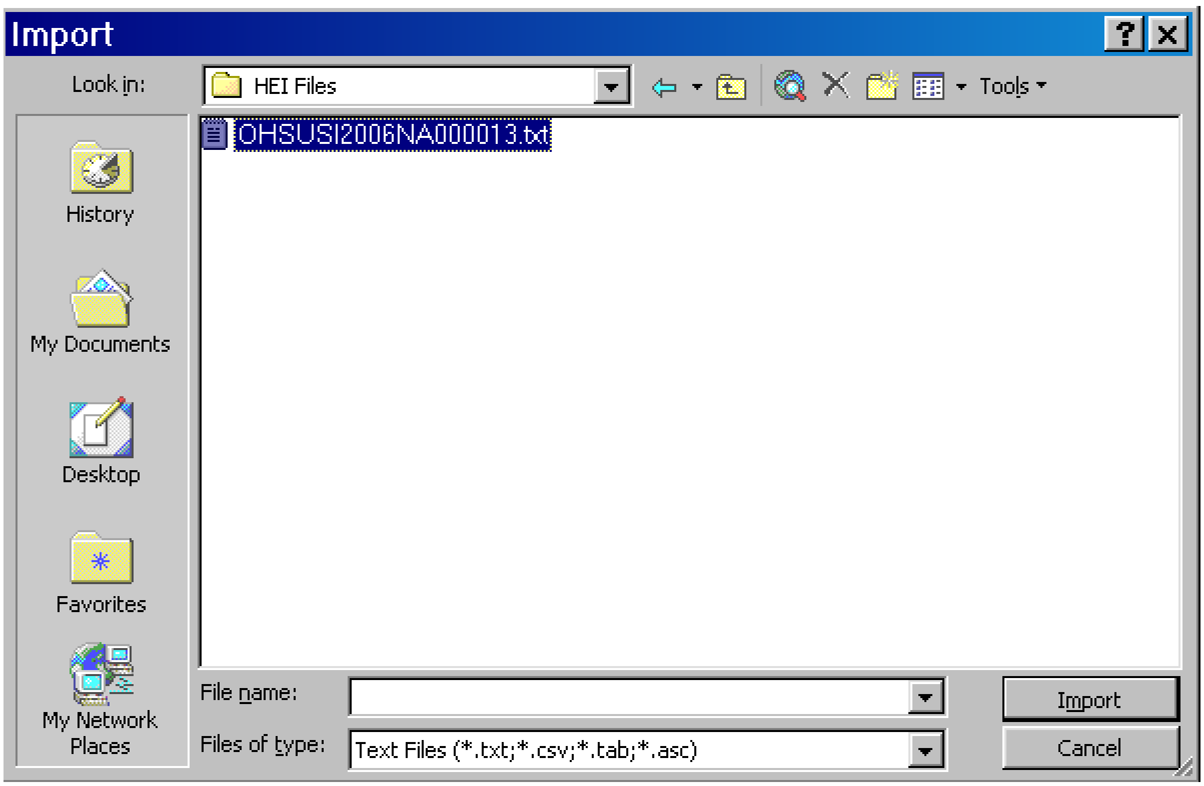
Insert the header record, save the file, and you're ready to submit it to HEI

Using Microsoft Access to Produce HEI Compatible Submission Files

Why would you want to use Access for this procedure? There are 3 reasons:
1. You normally keep your data in Access databases
2. Access is what you were given by your IT department,
3. You exported a text file from MS Excel but it contains variable length text fields that need to be converted to fixed-width text fields.

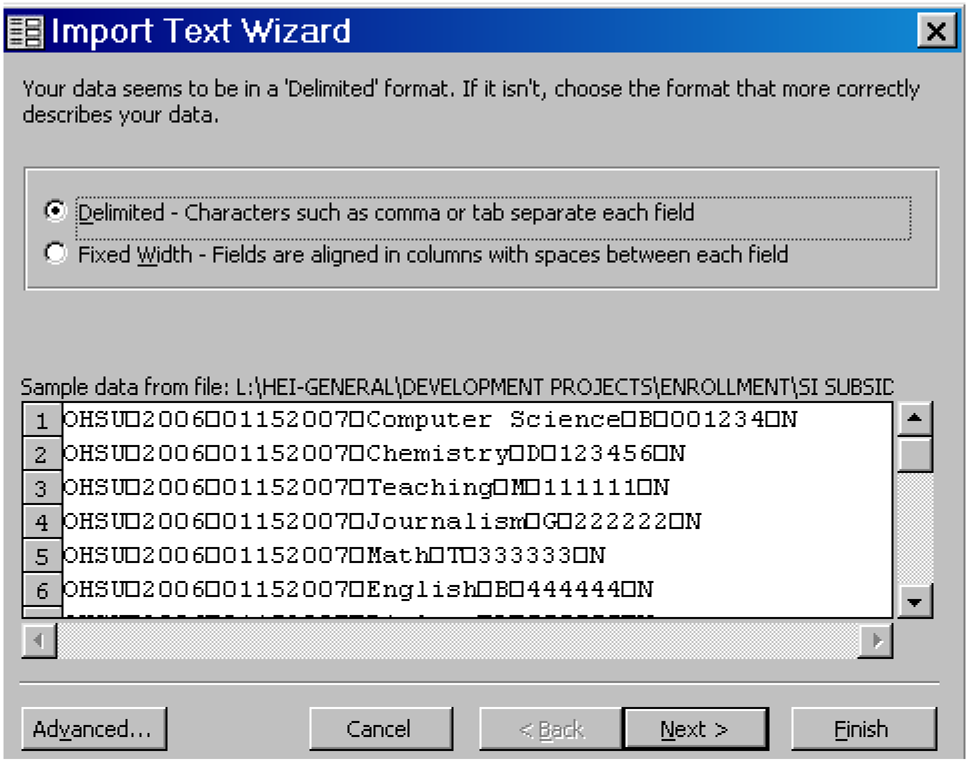
Importing Tab-Delimited Text Files into Access

If you have variable length text fields, the easiest method to specify the correct number of characters in each field is to import the file into Access as a tab-delimited text file. As part of the import procedure, you can maintain leading zeroes in numeric fields. To import the file, create a new database in Access, then go to the File Menu|Get External Data|Import and choose the tab-delimited text file that you saved previously.

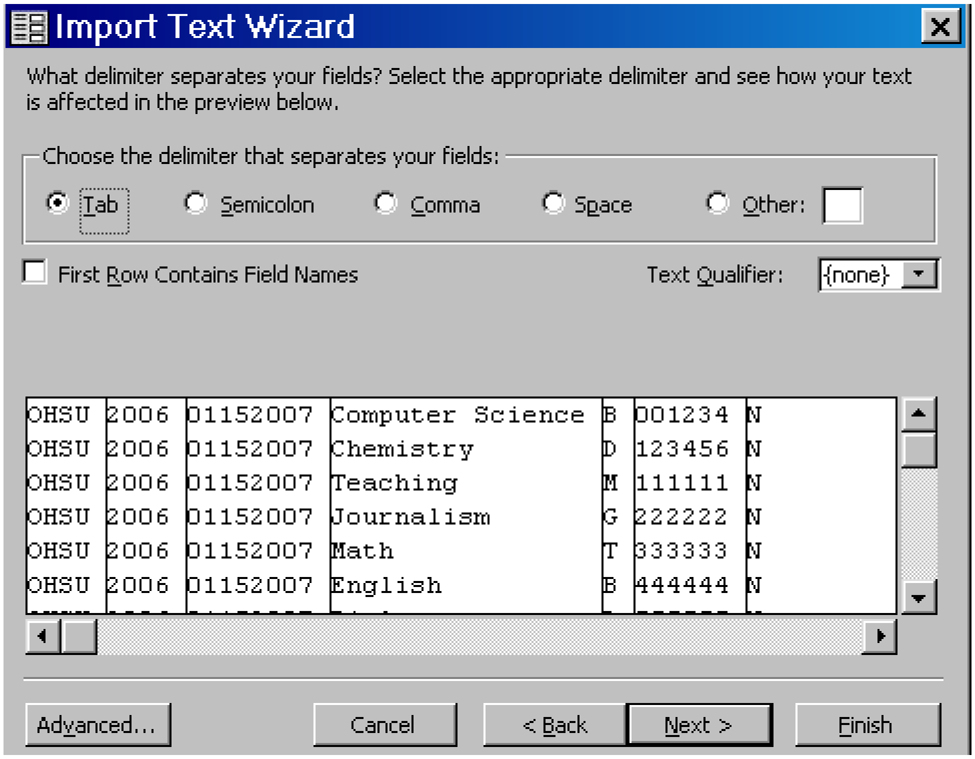


The import procedure in Access allows you to format the data to match HEI file specifications from the Data Submissions Document. Please follow these steps:

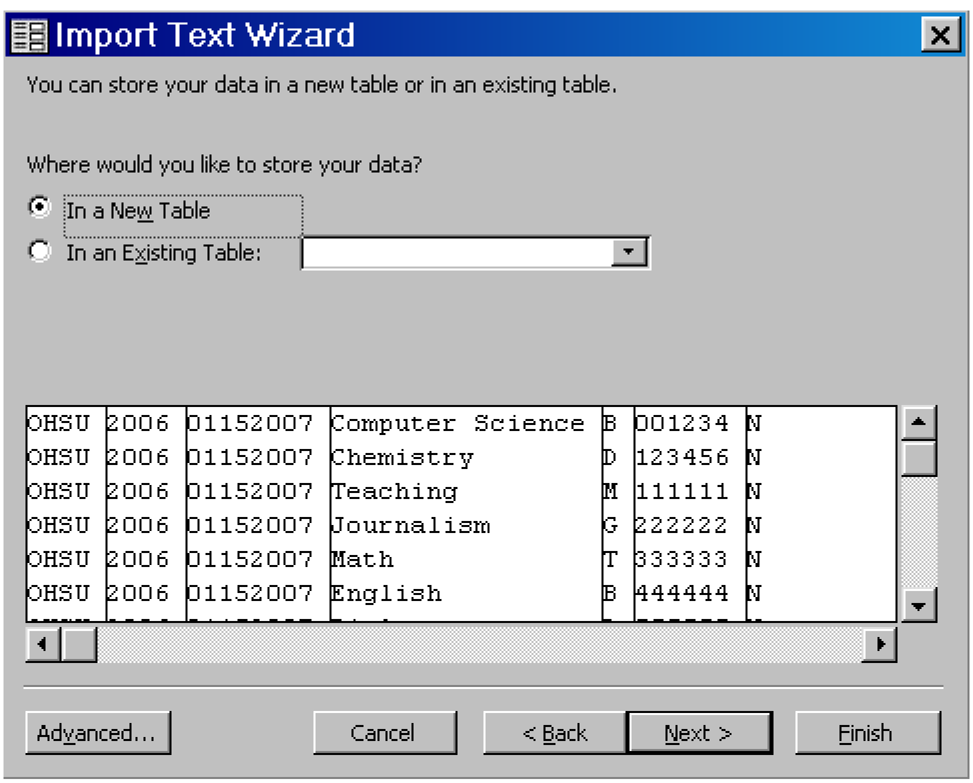
1. Select “Delimited” as the data format.



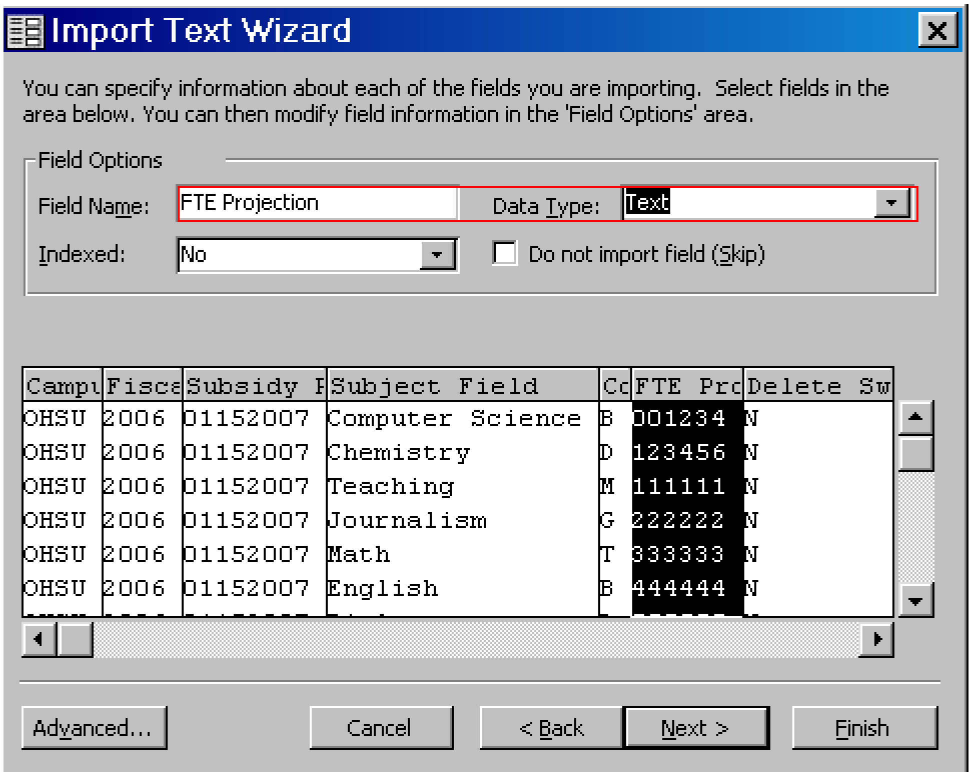
2. Choose "Tab" as the delimiter to separate data fields.



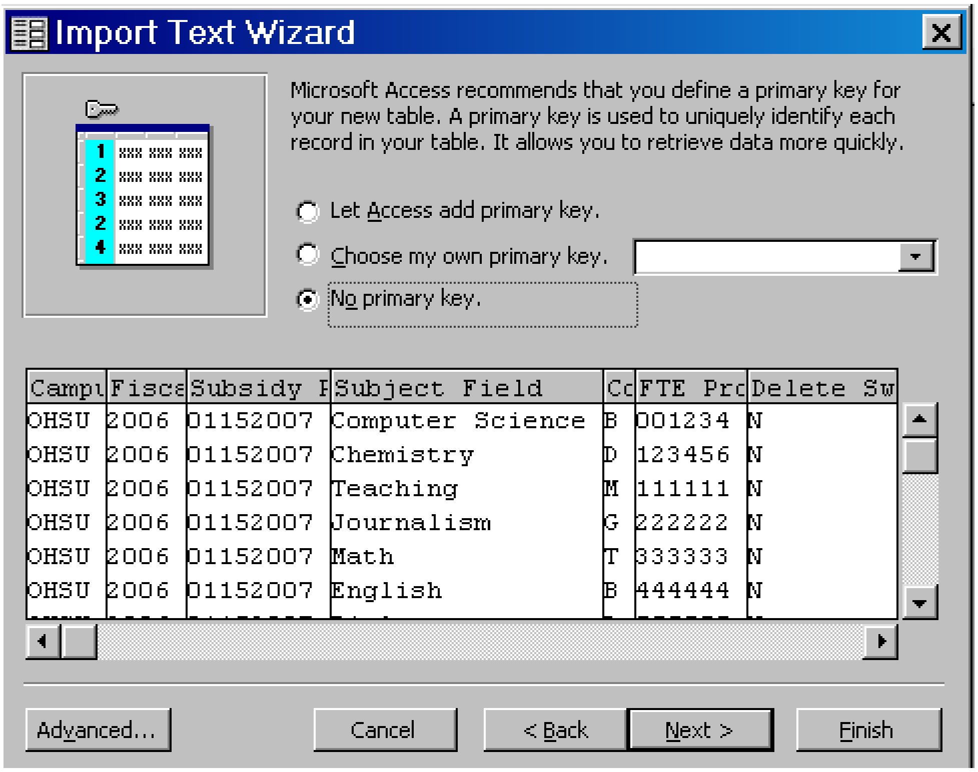
3. Store the data in a new table in Access



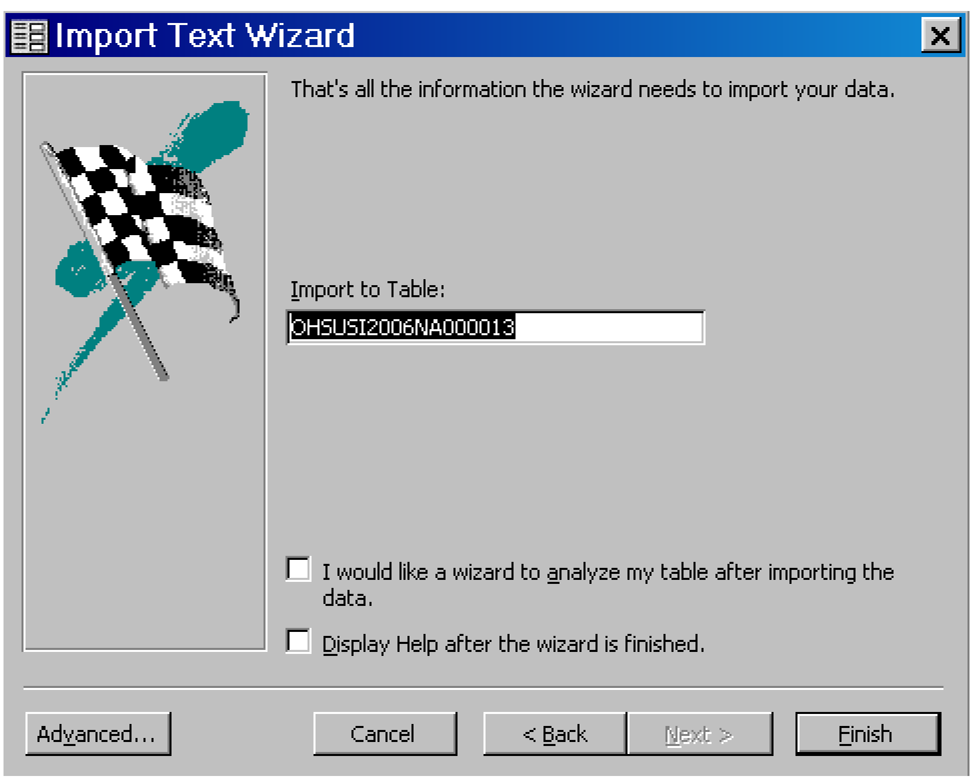
4. Click the Next button. Specify the Field Names and Data Types for each field. Numeric Fields specified as text fields will maintain leading zeroes.



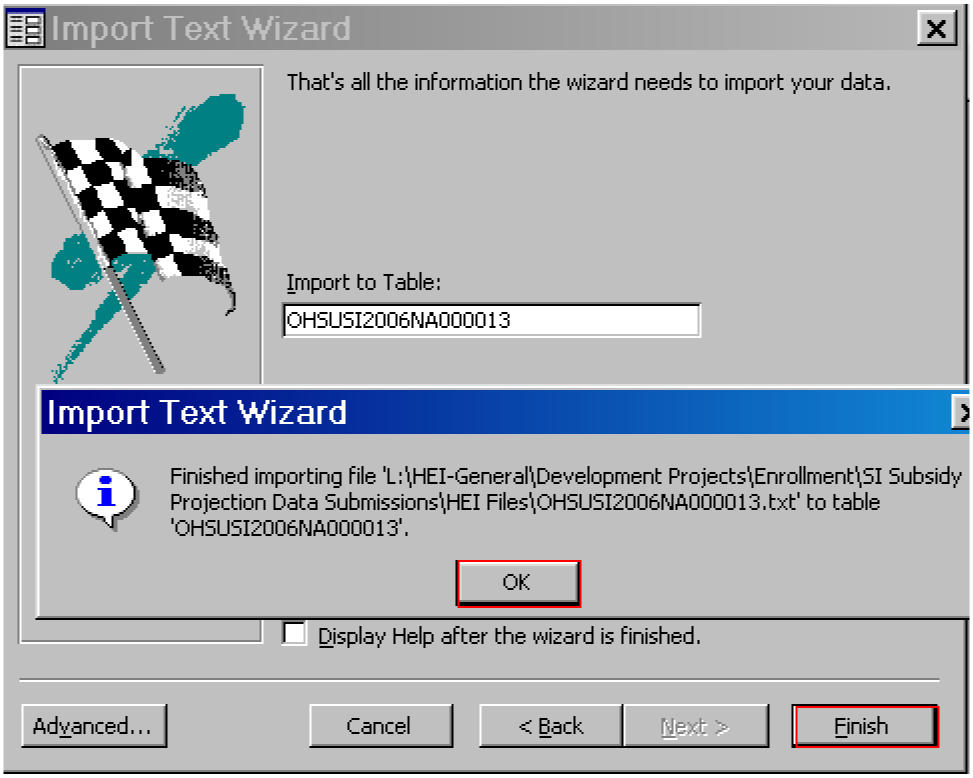
5. Select "No Primary Key."



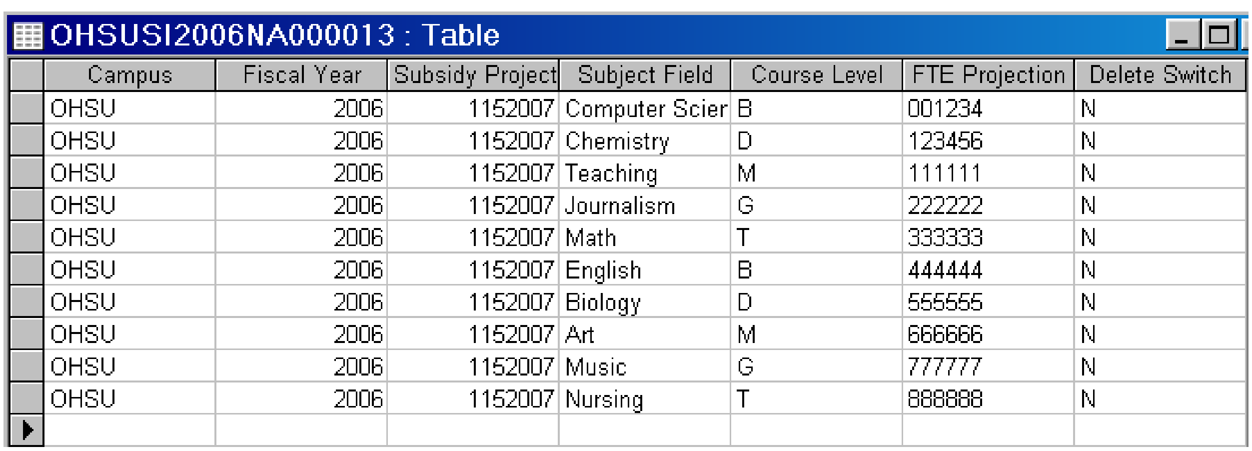
6. Enter the table name in the "Import to Table" dialogue box.



7. Click Finish. Then click OK.



8. Double-click the table name in Access to view the results.

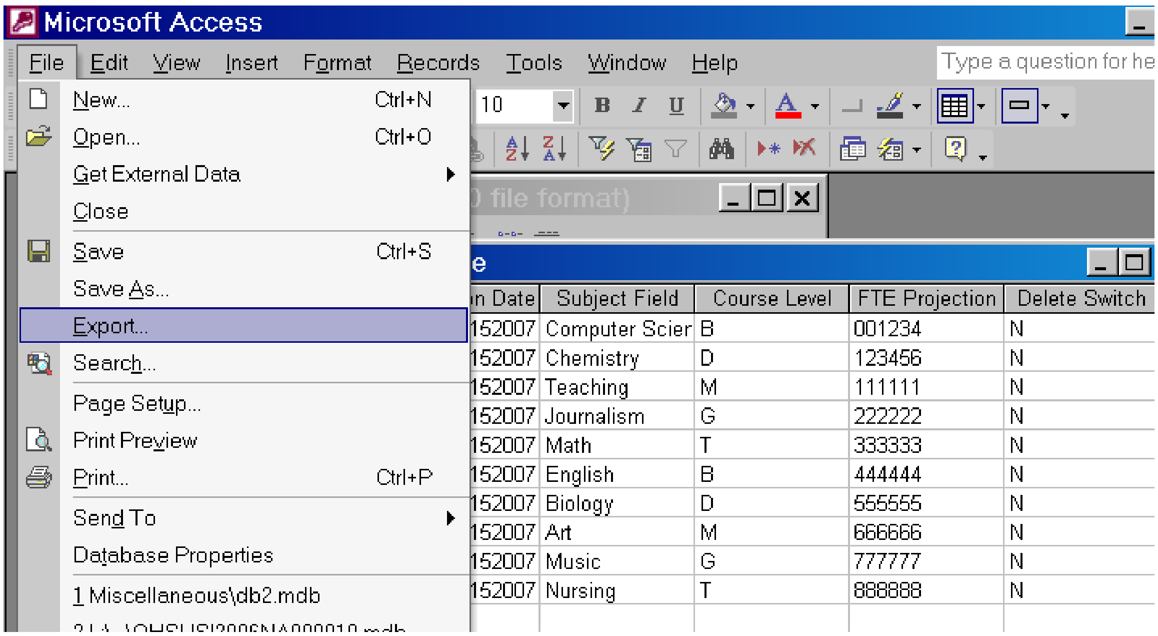

OHSUSI2006NA000013 : Table

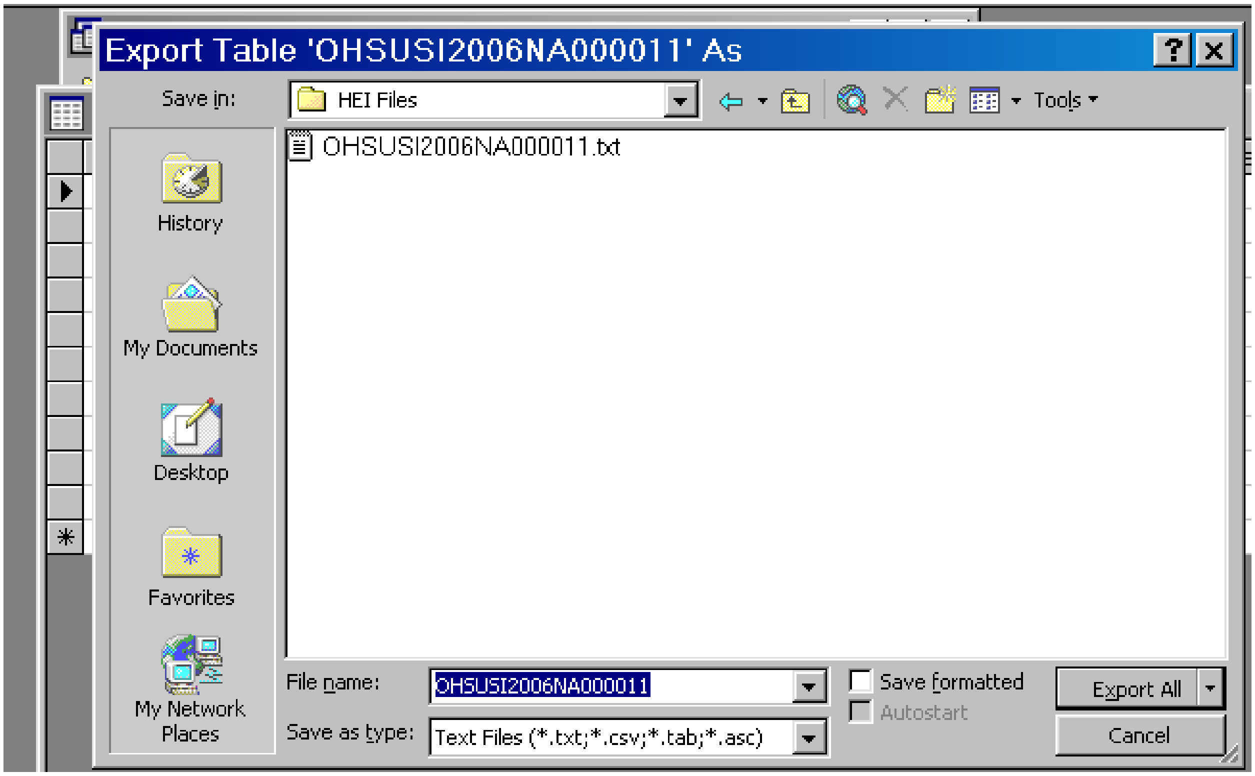
Campus	Fiscal Year	Subsidy Project	Subject Field	Course Level	FTE Projection	Delete Switch
OHSU	2006	1152007	Computer Scier	B	001234	N
OHSU	2006	1152007	Chemistry	D	123456	N
OHSU	2006	1152007	Teaching	M	111111	N
OHSU	2006	1152007	Journalism	G	222222	N
OHSU	2006	1152007	Math	T	333333	N
OHSU	2006	1152007	English	B	444444	N
OHSU	2006	1152007	Biology	D	555555	N
OHSU	2006	1152007	Art	M	666666	N
OHSU	2006	1152007	Music	G	777777	N
OHSU	2006	1152007	Nursing	T	888888	N

Exporting Fixed-Width Text Files from Access to Produce HEI Compatible Submission Files

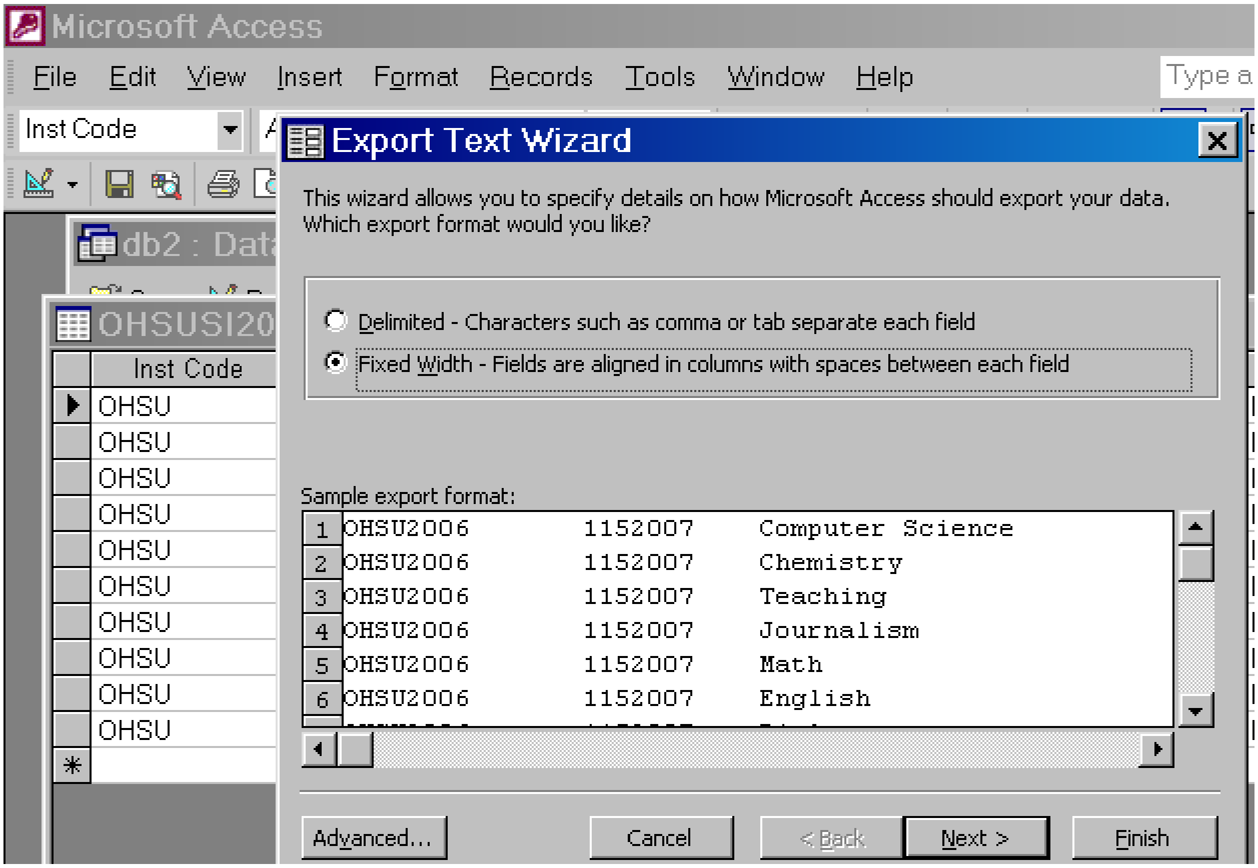
Once you import the file into Access, the data is stored as a table in the Access database.

To export a fixed-width text file, follow these procedures. Select "File|Export". This will open up the "Save As" dialogue.



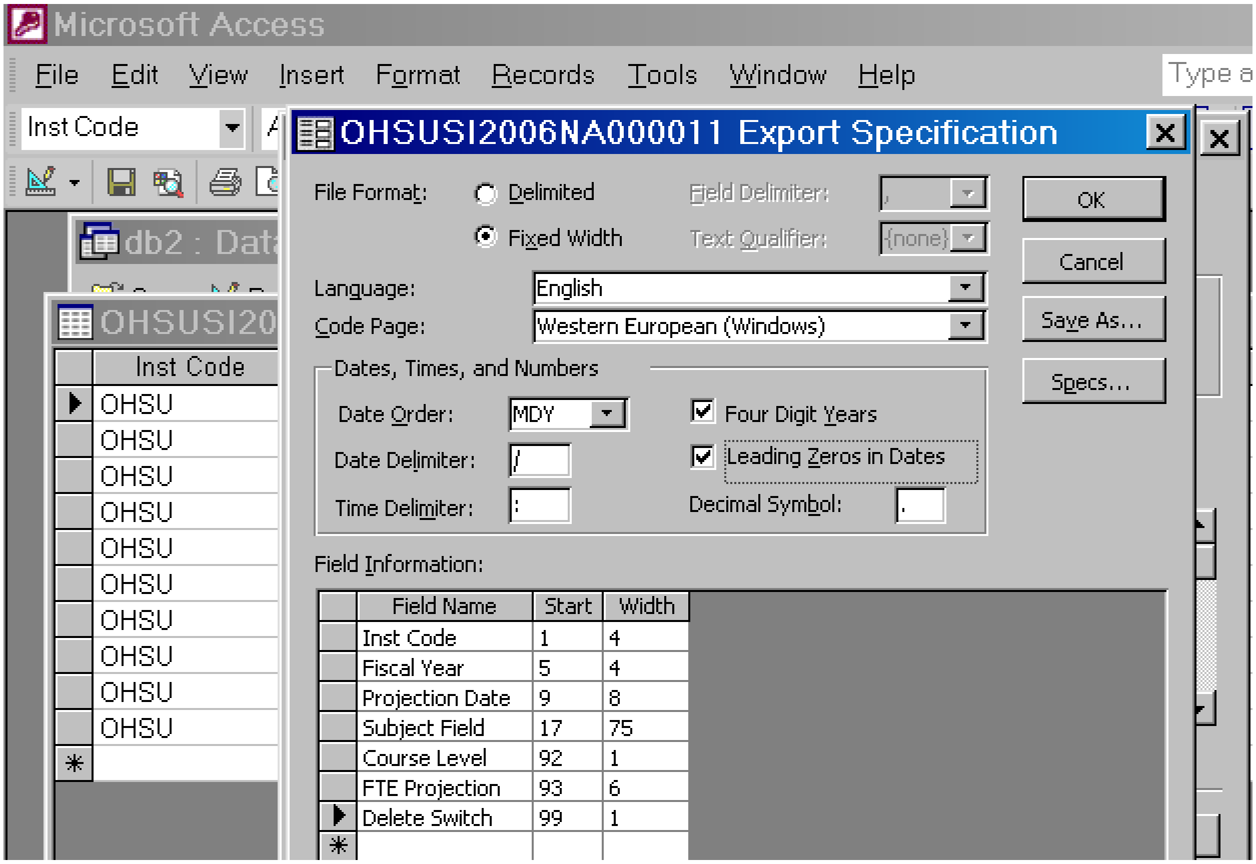


In the Save box, select "Text Files" as the data type and then click on "Export All." This will open the Export Wizard.

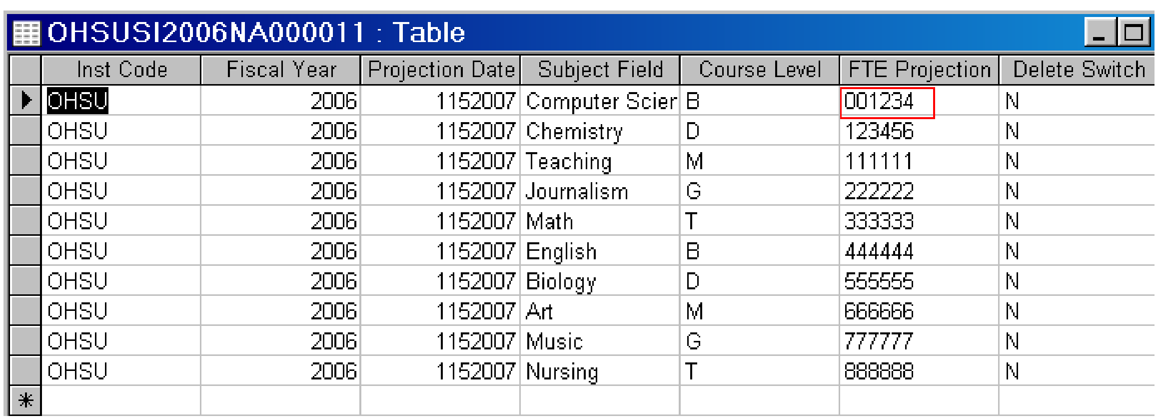


Click on “Fixed Width” and then click the “Advanced” button.

In the Advanced window, enter the starting positions and width (maximum number of characters) for each data field. See the HEI Data Submissions Document for the file layout. Click “OK.”



This will take you back to the previous window. Click the “Finish” button and the data will display correctly. Note the leading zeroes in numeric data fields.


OHSUSI2006NA000011 : Table

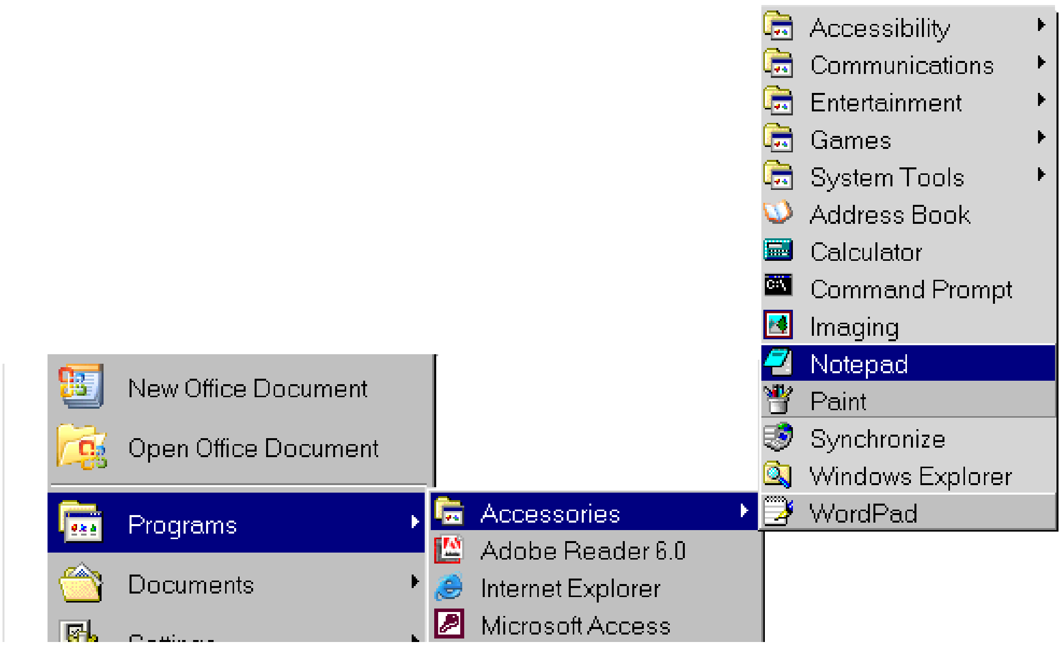
Inst Code	Fiscal Year	Projection Date	Subject Field	Course Level	FTE Projection	Delete Switch
OHSU	2006	1152007	Computer Scier	B	001234	N
OHSU	2006	1152007	Chemistry	D	123456	N
OHSU	2006	1152007	Teaching	M	111111	N
OHSU	2006	1152007	Journalism	G	222222	N
OHSU	2006	1152007	Math	T	333333	N
OHSU	2006	1152007	English	B	444444	N
OHSU	2006	1152007	Biology	D	555555	N
OHSU	2006	1152007	Art	M	666666	N
OHSU	2006	1152007	Music	G	777777	N
OHSU	2006	1152007	Nursing	T	888888	N

Now, open MS Notepad. Browse to the folder where you stored the text file. Open the file, type in the header record, and save the file. You are now ready to submit the file to HEI.

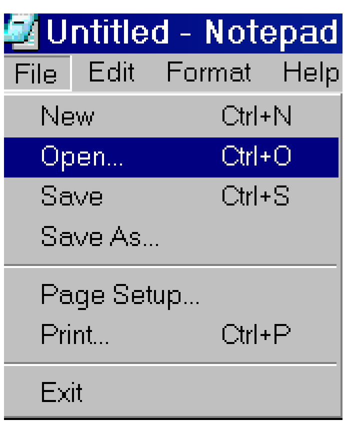
Using Microsoft Notepad to Produce HEI Compatible Submission Files

Notepad is a text editor which is a standard feature of Windows XP. Notepad can be used to create text files or to open files and save them in ".txt" format. Text files can be uploaded and submitted to HEI via the Data Input Site. Here is an example of how to access Notepad and save files in a text format:

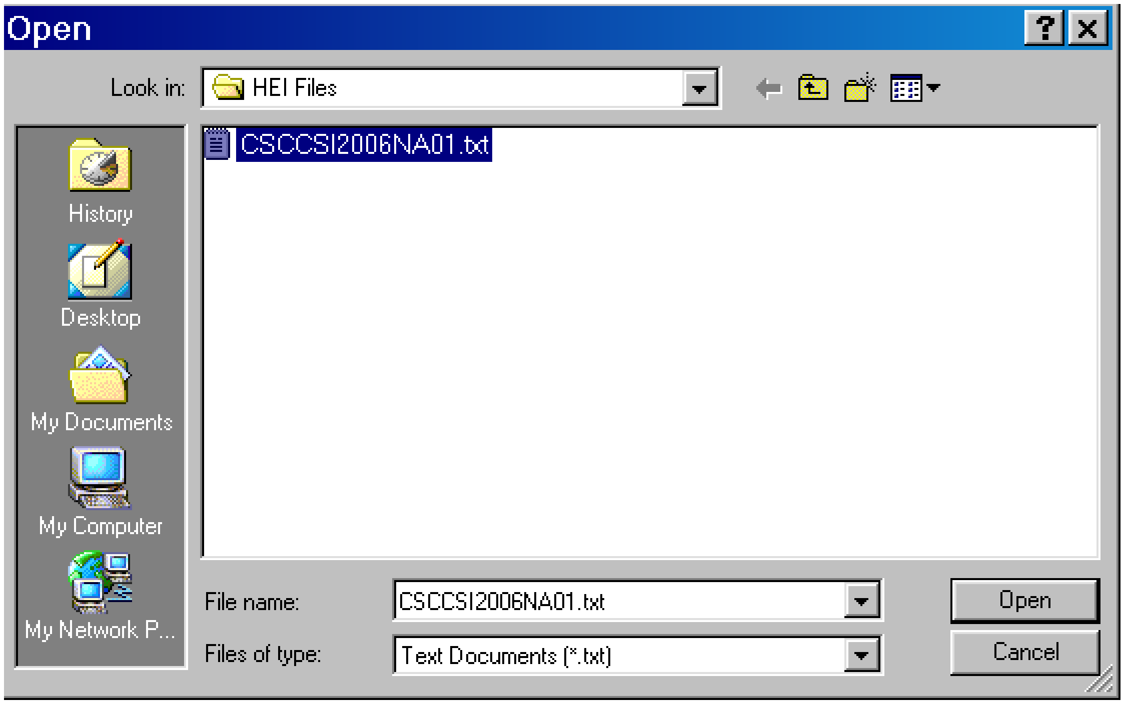
1. From the Windows desktop on your PC, click Start / Programs / Accessories / Notepad



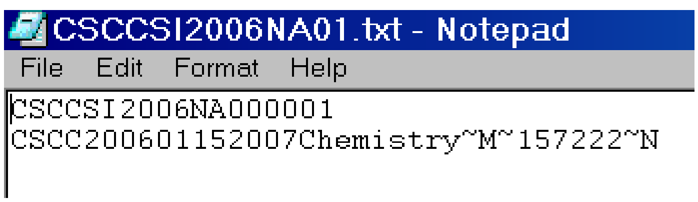
2. Next, choose File / Open from the File menu to open files with Notepad.



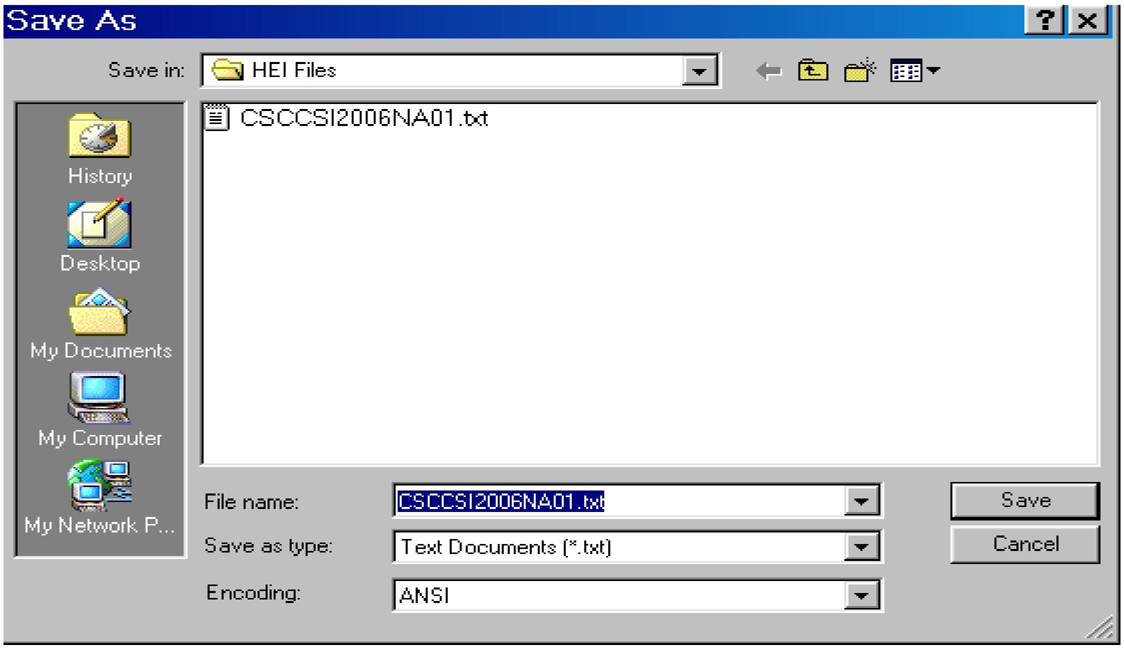
3. Browse to the file folder of your choice and open the file with Notepad.



4. Review the content and layout of the file. Specific file layouts are documented in HEI Data Submissions Documents.



5. Select File / Save As and save the file as a ".txt" file.



6. Submit the text file to HEI via the Data Input Site.

Training videos are available

A training video which reviews the batch HEI File Submission process is available from the HEI website. Here is the link:

http://regents.ohio.gov/hei/training/batch_intro_ds_catalog.html

The HEI training videos web page is located at http://regents.ohio.gov/hei/training/videos.php.

System Availability

Campus data reporters should expect to be able to transmit and edit files via the Data Input Site Monday through Sunday from 7:00 a.m. to 7:00 p.m. However, the first Saturday of each month is reserved for scheduled system maintenance from 8 AM to 12 Noon.

Files for which campus data reporters submit a load request by 4:00 p.m. Monday through Friday will be reviewed by Regents staff for overnight loading that evening. Load requests submitted after 4:00 p.m. Monday through Friday will be reviewed the following weekday for loading the following weeknight. No files will be reviewed or loaded on state holidays, which include: New Year's Day, Martin Luther King Day, President's Day, Memorial Day, Fourth of July, Labor Day, Columbus Day, Veteran's Day, Thanksgiving, and Christmas. In addition, there are other times when the data management and analysis team is out of the office. In this case, files will be reviewed immediately upon our return.

Daylight Loads

On a very limited basis, Ohio Board of Regents administrators can give a *Daylight Load* option to Data Reporters as necessary. It is the responsibility of the Data Reporter to contact HEI staff to request a daylight load. Daylight loads refer to a process whereby campus file submissions are loaded into the HEI database the same day during normal business hours, as compared to overnight file processing. Availability of daylight loads is determined by the volume of system utilization.

A Note on Browsers

Browsers are software applications which allow a user to view web pages. The HEI system can be viewed using Internet Explorer 4.0 or above or Netscape Navigator 5.0 or above.

Changes to File Submissions and Data Submission Documents

HEI uses standard operating procedures when changing Data Submission Documents and/or file submissions:

1. All substantive changes will be announced via e-mail
2. All substantive changes will be listed on the HEI website in the Summary of Changes page
3. Minor changes will not be announced or included in Summary of Changes pages. Minor changes are those that do not alter the meaning of the text or the file submission layout. Examples include, but are not limited to: correcting spelling and punctuation, improving graphics, and updating links.
4. When changes are released to a limited group of Data Reporters for feedback prior to general availability, this practice is known as a "Pilot" project. Notification will be sent to:
   - Pilot Data Reporters
   - E-mail group distribution lists
5. When changes to a file submission are released to all Data Reporters prior to assigning a fixed edit window or due dates, this period is known as the "practice" period. During the practice period, notification of changes will be sent to:
   - All Data Reporters assigned to submit practice files.
   - E-mail group distribution lists
6. The Production phase refers to a file submission which is generally available to all Data Reporters on a term submission or annual submission basis. During the production phase, notification of changes will be sent to:
   - All Data reporters assigned to submit HEI files according to their user permissions.
   - E-mail aliases

7. Campuses are generally given six months to prepare information systems and staff for file submission changes. Notification e-mails are generally sent directly to the Data Reporters with a copy to the HEI Liaisons.

8. To receive timely and relevant communications from HEI, make sure your permissions are up to date by visiting the people page at http://regents.ohio.gov/hei/people.php.

Requesting an Extension

HEI data areas may have specific date ranges during which data can be edited and submitted.* These date ranges are called edit/submission windows. During the dates in which the window is open, data can be edited/submitted as often as necessary. However, after the window closes data can no longer be edited or submitted.

To submit data after the window closes, it is necessary to request an extension from HEI. The steps in requesting an extension are detailed below.

*Please refer to specific data files for the edit/submission window dates

1. Select Request Extension from the bottom left side of the HEI Data Input Site or use this link from the HEI Request Extension page: http://regents.ohio.gov/hei/datasubdoc/general/reqextension.html
2. Choose the data area, year and term for which you need an extension.
3. After selecting OK, your choices will be listed at the top of the page. Verify the information you selected is correct.
4. Select the number of days you wish the window to remain open.
5. Give the reason why you are making the request.
6. Once you've submitted your request, an HEI administrator will review it and make a decision on whether or not to approve the request that same day. For this reason it is important that you include as much detail as possible when giving the reason why you need the extension.
7. You will receive an email explaining the decision to approve or not to approve your extension request. If the request is approved, the extension will be from the date the request was made. If the window was not closed at the time of the request, the extension will be from the last day of the edit window.
8. If the window closes again before you finish editing/submitting your files, you will need to make a request for another extension.

HEI LIAISONS

As the HEI liaison, you are responsible for determining which users should have access to HEI data at your institution whether for reporting data to HEI or obtaining research from HEI. You are also responsible for finalizing your institution's data. This process certifies that your data is complete and accurate. It also generates reports that make the subsidy process open and predictable.

End of Term Process

The end-of-term process is used to confirm that term-oriented enrollment files, the Course Sections Taught (ST) and Funding Unit Inventory (FI) files submitted to HEI for each term are complete and accurate. Once a term is finalized, authorized users are able to query the data for that term for subsidy, policy and research purposes.

At the end of spring term, the process is used by institutions to confirm that enrollment data for the entire fiscal year are complete and accurate.
The HEI liaison appoints an end-of-term coordinator who verifies that the data reporters have submitted all applicable data and runs the end-of-term reports.

Update: As of fiscal 2007, there are two taxonomies for subsidy calculations. The procedure to run end-of-term reports remains the same, but there are two links to separate web pages for the current and the new taxonomies.

New Taxonomy:

You can request end-of-term reports using the new SII taxonomy for any of the terms of FY 2007, and beyond, for which HEI enrollment data has been submitted. The web page link is https://app.regents.state.oh.us/cgi/end_of_term_subsfte.pl .

Then, after they have been run, you can view the end of term reports at https://app.regents.state.oh.us/cgi/subsfte_rep .

Old Taxonomy:

To run the End-of-Term Report:

1. Go to the Restricted Outputs web page.
    a. Open your browser and going to the HEI web page at http://www.regents.state.oh.us/hei.
    b. Click on the "Queries" link.
    c. Click on the "Restricted Outputs" link.
2. Open the End-Of-Term application by clicking on "End-of-Term" (use to calculate Subsidy FTE and to finalize the term).
3. Request that end-of-term reports be produced by following the instructions in the end-of-term application titled "Request End-Of-Term Reports".
4. When you receive the email indicating the results are ready, go back to the "Restricted Outputs" link and open the "Subsidy Process/Success Challenge/Resource Analysis" link.
5. Review the Subsidy FTE results

6. If necessary, have the data reporters make additions or corrections to data files to complete the data submissions for the term. When corrections are complete, return to step one of this process.
7. If the data is complete and accurate, go back to the end-of-term application and request that the term be finalized by following the instructions in the end-of-term application titled "Finalize end-of-term". This process certifies that the data for the term are complete and accurate.
8. Data for the term is now available to those with access for subsidy, policy and research purposes.

Note*:* Finalizing End-of-Term is run once. The procedure to finalize data encompasses the new taxonomy.

Because Finalize End-of-Term releases data to be included in statewide queries and reports, there are some protections provided in the timing of running the process. These protections include:

- Finalize End-of-Term may not be executed until after at least one Course Enrollment (CN) and Faculty Course Sections Taught (ST) file are loaded onto the database for the term being finalized. Rio Grande Community College and Northeastern Ohio Universities College of Medicine are exceptions to this rule due to limited data submissions.
- After Finalize End-of-Term is executed, edit windows for the term are closed.
- After Finalize End-of-Term is executed, Subsidy FTE may not be re-calculated.

The Ohio Board of Regents staff has the capability to reverse the Finalize End-of-Term process so that more data input files may be submitted, but this does not reverse the effects of statewide publication of the data after the data were originally finalized. To unfinalize a term, you will need to follow the Request Extension Process. <u>Please be sure to re-finalize the term when you have completed your corrections.</u>

File Submission Permissions
It is recommended that the HEI Liaison should authorize two data reporters for each file, ensuring that a substitute will already have an account if the primary data reporter becomes unavailable.

Add a User
1. Go to the HEI Front Door at http://www.regents.ohio.gov
2. Select Queries link
3. Select Restricted Outputs Link
4. Type in your username and password into the popup.
5. Select Liaisons Only link
6. Select Administer HEI Web Account Link
7. Fill in new user information
8. Click the Page 2 button.
9. Select appropriate check boxes for data submissions by area, as well as any restricted outputs
10. Click the submit button.
11. You will receive a popup that will state "HEI Web Account authorization request has been received. An email has been sent to you and the new Representative with a copy of the User Agreement Form. The account will be activated after receiving the signed user Agreement Form. You will be notified by email."
12. Click the OK button.

Modify a User
1. Go to the HEI Front Door at http://www.regents.ohio.gov
2. Select Queries link
3. Select Restricted Outputs Link
4. Type in your username and password into the popup.
5. Select Liaisons Only link
6. Select Administer HEI Web Account Link
7. Select the user name you wish to modify from the drop down menu.
8. Select appropriate check boxes for data submissions by area, as well as any restricted outputs
9. Click the Approve button.

Delete a User
1. Go to the HEI Front Door at http://www.regents.ohio.gov
2. Select Queries link
3. Select Restricted Outputs Link
4. Type in your username and password into the popup.
5. Select Liaisons Only link
6. Select Administer HEI Web Account Link
7. Select the representative from the drop down box
8. Click the Delete Individual button.
9. You will receive a popup that will say:

   Are you sure that you want to delete this user entirely from the HEI system? This action cannot be undone!
10. Click ok if you are certain.

11. You will receive a popup which states “The selected user has been deleted completely from the HEI System.”
12. Click ok
13. You will receive an email as a record of the delete.

Note: Users may be partially deleted. If a person has access to multiple reporting areas, for example Enrollment and Financial Aid, the Liaison can delete one reporting area without affecting the other.

To add/delete a liaison, you will need to contact HEI.

Academic Calendar

1. The HEI liaison, appointed by the president of each institution, has the responsibility to authorize data reporters to submit academic calendar information for their institution.
2. The academic calendar administrator submits this information using the Academic Calendar page via the Restricted Outputs. The Academic calendar page is located at https://app.regents.state.oh.us/cgi/acad_cal.pl
3. The academic calendar administrator submits the start and end dates for the upcoming fiscal year plus two terms.
4. This information must be submitted and loaded before files can be submitted to HEI for those terms.
    1. If this information is not submitted, the start and end dates for files submissions will not appear on the site File Submissions Schedule.

For the Start Date for a given academic term, use the earliest standard first day of classes for any college or school within the institution excluding the Law School. For the End Date, use the latest last day of the final exam period for any college or school within the institution (excluding the Law School).

If term type is unknown or your institution is changing term types (e.g., changing from quarter to semester, or semester to quarter), please contact HEI at help-hei@regents.state.oh.us or (614) 466-5045.

Annual Reports and Standard Publications

The Ohio Board of Regents staff publishes different types of reports. These reports are public information available from the Regents web site at http://regents.ohio.gov/hei/reports.php

Note: No HEI web access account is required for viewing unrestricted output reports.

Affiliated Data Areas

Tech Prep

The Ohio Board of Regents (OBR) co-manages College Tech Prep. Using its direct, non-governing relationship with all Ohio colleges and universities, OBR forms critical linkages between secondary and postsecondary education—essential to the College Tech Prep strategy. OBR works with the Ohio Department of Education and other agencies to promote a seamless primary, secondary and higher education system. Information about resources available to Tech Prep via the Ohio Board of Regents' Higher Education Information System may be found at: http://regents.ohio.gov/hei/datasubdoc/techprep/techprepfiles.php

OCAN

The Ohio College Access Network (OCAN) was founded in 1999 by KnowledgeWorks Foundation in partnership with the Ohio Board of Regents, Ohio Department of Education and existing college access programs committed to the common goal of helping more Ohio students pursue postsecondary education through the creation and support of local college access programs. The Ohio Board of Regents serves as a leading public agency in partnership with OCAN, providing advice and consultation from the higher education perspective on issues related to access and participation in postsecondary education. Information about resources available to OCAN via the Ohio Board of Regents' Higher Education Information System may be found at: http://regents.ohio.gov/hei/datasubdoc/ocan/ocanfiles.php

OLN

The Ohio Learning Network (OLN) works with higher education, schools, policy makers, business and industry, government, and local communities using technology to expand educational opportunities for Ohioans. The collaboration between the Ohio Board of Regents' Higher Education Information System and OLN allows both the State and campuses to better benchmark distance learning activity for policy decisions and provide resourceful information about distance education activity in the Annual Performance Report. Information about resources available to OLN via the Ohio Board of Regents' Higher Education Information System may be found at: http://regents.ohio.gov/hei/datasubdoc/oln/olnfiles.php

TRIO

TRIO Programs are educational opportunity outreach programs designed to motivate and support students from disadvantaged backgrounds. TRIO includes six outreach and support programs targeted to serve and assist low-income, first-generation college students, and students with disabilities to progress through the academic pipeline from middle school to post-baccalaureate programs. TRIO also includes a training program for directors and staff of TRIO projects and a dissemination partnership program to encourage the replication or adaptation of successful practices of TRIO projects at institutions and agencies that do not have TRIO grants. The Ohio Board of Regents' Higher Education Information System (HEI) collaborated with the Ohio Association of Educational Opportunity Program Personnel (OAEOPP) to produce a file submission and tracking interface that greatly enhanced the ability of Ohio TRIO programs to meet their federal reporting requirements as well as conduct research and analyses on their students. Information about resources available to TRIO may be

found on the HEI website at
http://regents.ohio.gov/hei/datasubdoc/trio/triofiles.php

Non-Credit
The Non-Credit affiliated data area involves all of the courses and activities administered by Ohio colleges and universities that do not contribute academic credit towards the award of a degree in an approved program. Collection of non-credit data helps to validate the outcomes of non-credit instruction statewide and aids in the decision making processes for funding allocations. Information about resources available to the Non-Credit data area via the Ohio Board of Regents' Higher Education Information System may be found at:
http://regents.ohio.gov/hei/noncredit/index.php

IPEDS
IPEDS refers to the Integrated Postsecondary Education Data System, a web-based data collection system by the National Center for Education Statistics (NCES). IPEDS enables institutional reporters to provide NCES with statistical data for your institution. The IPEDS home page is located at
http://nces.ed.gov/ipeds/webbase.asp.

NEALP

The Nurse Education Assistance Loan Program (NEALP) provides financial assistance to Ohio students enrolled for at least half-time study (or accepted for enrollment) in an approved Ohio nurse education program. NEALP provides funding for nurses who intend to serve as instructors as well as students who intend to serve as nurses after graduation. More information on the NEALP program and NEALP file submissions is located on the HEI website at http://regents.ohio.gov/hei/datasubdoc/nealp/nealpfiles.php

THE AUDIT PROCESS

Auditing Enrollment Data

The Board of Regents is required by statute to "conduct enrollment audits of state-supported institutions of higher education." The purpose of the enrollment audit is to determine if enrollment data submitted to the Board of Regents for subsidy purposes are in conformity with state policy. The state of Ohio distributes over $1.6 billion per year to colleges and universities via enrollment-based formulas. The Board of Regents has the responsibility to ensure that the data used to distribute these funds are reliable, valid and consistently reported across campuses.

The enrollment audit process proceeds as follows:

1. Institutions selected for audit notified via letter to the president and audit contact. Attached to letter is a Pre-Audit Survey Part A for completion by audit contact
2. Institution audit contact returns Pre-Audit Survey Part A
3. Regents staff processes Pre-Audit Survey Part A
4. Institution notified of audit 6 to 8 weeks in advance and sent Pre-Audit Survey Part B and audit sample
5. Pre-audit meeting on site (if necessary)
6. Institution returns completed Pre-Audit Survey Part B and supporting documentation
7. Regents staff audits surveys and documentation at Regents offices.
8. Regents staff conducts audit
9. Feedback session facilitated by Regents staff with Institution staff.
10. Institution staff reviews audit findings and responds by a date determined by Regents' staff
11. Chancellor submits a draft of the final report to institution president; the president may respond (if desired) by a date determined by Regents' staff
12. Final report issued to institution president

Financial Aid Audits

State Grants and Scholarships (SGS) is a department within the Board of Regents which administers a variety of grant and scholarship programs to aid students as they pursue higher education.

Campus Financial Aid Officers and Data Reporters have a number of file submissions and queries which they use to submit payment requests, refund requests, and check eligibility status on behalf of students. For a list of financial aid file submissions, please refer to page 5 of this document. For more information on grants and scholarship programs available to Ohio students, please visit the SGS home page at http://regents.ohio.gov/sgs/.

Periodically, SGS personnel conduct financial aid audits. Since 2002, there has been audit collaboration between SGS and HEI. For state-supported colleges and universities, the financial aid and enrollment audits take place concurrently.

A “Summary Error Report of Statewide Financial Aid Audits” conducted and completed since June 2001 is available from the HEI web site at http://regents.ohio.gov/hei/faidreport.html.

TRAINING - DOES HEI OFFER USER TRAINING AND USER CONFERENCES?

Yes. Training sessions for new users typically occur in the Spring and Fall. Training is also delivered in brief, narrated videos. Training videos are located at http://regents.ohio.gov/hei/training/videos.php. Training videos are generally 2-3 minutes in length.

HEI Analysts are available to present on campus and at Education Professional Conferences by request. Previous presentations are available online at http://regents.ohio.gov/hei/presentations.php

Video conferences or "Webinars" are also available upon request.

HEI PRESENTATIONS

The HEI staff has made informational presentations for many different audiences including the Association of Institutional Research (AIR) and the State Higher Education Executive Officers (SHEEO). Here is the link to some of those presentations.

http://regents.ohio.gov/hei/presentations.php

HELPFUL APPLICATIONS LINKS

In conclusion, here are a few helpful links for reference:

HEI Contacts: http://regents.ohio.gov/hei/people.php
HEI Data Input Site: http://regents.ohio.gov/hei/dis_cert.php, for HEI file submissions.

Course Inventory Expert System (used to assign subsidy levels for undergraduate courses): http://regents.ohio.gov/hei/ci/documentation/ciexpertsystemhome.php

Ohio Learning Network (used to query Ohio's Distance Education courses by institution, year and term): http://www.ohiolearns.org/catalog/courses_form.php

IPEDS – The web-based data collection system for the Integrated Postsecondary Education Data System (IPEDS) of the National Center for Education Statistics (NCES). This system is a national system which enables you to provide NCES with statistical data for your institution: http://nces.ed.gov/ipeds/webbase.asp.

HOW CAN I CONTACT HEI?

HEI contact information is located at http://regents.ohio.gov/hei/people.php.