High School Graduate System

(HGS)

(Includes Cumulative Errata Sheet and Special 2010 Reporting Revision Addendum)

February, 2009
Maryland Higher Education Commission
Office of Information Systems

High School Graduate System (HGS)

Addendum for the 2010 Reporting Revisions

(covers changes during the collection year 2011)

February, 2009

Summary of changes:

In the past data collection standards allowed individuals to be identified in only one racial category. The federal government has developed new ethnic and racial categories to provide a more accurate picture of the nation's diversity. The new categories enable individuals to be identified in both ethnicity and race. They also allow more than one race to be identified

This addendum provides specific instructions for the HGS system including a revised file format and data dictionary changes. It was recommended by the State-wide workgroup that the schedule for 2010 reporting revisions be oriented around the federally mandatory academic year of AY 2010-2011. Since HGS collects data for the prior academic year 2010-1011, a fully modified HGS file containing the new fields will be required in **September of 2011**.

For additional clarification see the 2010 Reporting Revisions Statewide Workgroup "Final Recommendations" available on the web at:
http://data.mhec.state.md.us/MACInfo/Final%202010%20Workgroup%20Recommendations.pdf

Collection Year 2011 –

Additional 7 New Fields to be reported in collection year 2011
Citizenship, ethnicity and race **(positions 90-96)** are collected in seven new fields. Each student record has an indicators for US citizenship, Hispanic/Latino ethnic origin and five race categories under 1997 standards.

- **US Citizenship** **(position 90) DD24**
- **Hispanic/Latino Ethnicity** **(position 91) DD25**
- **White** **(position 92) DD26.1**
- **Black/African American** **(position 93) DD26.2**
- **Asian** **(position 94) DD26.3**
- **American Indian/Alaskan Native** **(position 95) DD26.4**
- **Native Hawaiian/Pacific Islander** **(position 96) DD26.5**

A revised HGS file format below shows the new fields highlighted in purple. The revised format includes an additional column labeled, "MAC Year Required" to note the collection year the new fields are to be reported.

High School Graduate System (HGS) Version 2 File Format Specifications

Record Position	Field Length	Data Element	Data Dictionary	Description	MAC Year Required
1-4	4	Collection Year	DD1	Collection Cycle Year submitted e.g. "2009"	
5	1	Collection Period	DD2	Always = "9" for annual..	
6-11	6	FICE	DD3	Institution identifier using FICE codes.	
12	1	Sub-campus code	DD4	Code for institution use for multi-campus or organizational identification.	
13-21	9	Identification Number	DD5	Social Security Number or alternative student identifier (when allowed).	
22	1	Identification Number Type	DD6	Code "blank" if the Identification Number is a real SSN or ITIN. Code "2" to indicate that the identifier is NOT a real SSN or ITIN. For independents use Code "2" to indicate a non-MD resident.	
23	1	Race/Ethnicity (1977 Standard)	DD20	The 1977 standards for single category race/ethnicity. Required through 2009 collection and reported if available 2010 and beyond.	
24	1	Gender	DD21	Student gender or assigned gender if unknown.	
25-26	2	Degree Sought	DD30	Degree code associated with program taxonomy that student is seeking or non-degree if appropriate.	
27-34	8	Program Taxonomy	DD31	MHEC taxonomy for student's most recent program area, last two positions always blank.	
35	1	Fall Attendance	DD33	Standard codes for attendance in fall term.	
36	1	Spring Attendance	DD34	Standard codes for attendance in spring term	
37	1	Admission Exemption	DD38	Code to indicate how student first admitted in reporting.	
38-43	6	High School Code	DD40	Based on College Board school codes.	
44-47	4	Cumulative Native Credit Hours Earned	DD44	Current credit hours completed at reporting institution, in format 62.5="0625"	
48-50	3	Cumulative GPA	DD52	Student's current grade point average as defined by institution, in format 3.52="352"	
51	1	Math Remedial Assessment	DD45	Standard remedial code	
52	1	English Remedial Assessment	DD46	Standard remedial code	
53	1	Reading Remedial Assessment	DD47	Standard remedial code	
54	1	First Math Grade	DD48	Letter grade of student's first math credit course.	
55-63	9	First Math Course ID	DD49	Institution's course identifier of student's first credit math course.	

64	1	First English Grade	DD50	Letter grade of student's first English credit course.	
65-73	9	First English Course ID	DD51	Institution's course identifier of student's first credit English course.	
74-76	3	SAT Math Score	DD53	College Board SAT Math Score.	
77-79	3	SAT Verbal Score	DD54	College Board SAT Reading/Reasoning score.	
80-81	2	ACT Math Score	DD56	ACT math score as reported to institution.	
82-83	2	ACT English Score	DD55	ACT English score as reported to institution.	
84-85	2	ACT Reading Score	DD57	ACT reading score as reported to institution.	
86-87	2	ACT Science Score	DD58	ACT science score as reported to institution.	
88-89	2	ACT Composite	DD59	ACT composite score reported to institution.	
90	1	US Citizenship	DD24	Identifies whether student is in the U.S. Citizenship Group or not.	2011
91	1	Hispanic/Latino Ethnicity (1997 Standard)	DD25	Identifies whether student is of Hispanic or Latino origin under 1997 standard.	2011
92	1	White (1997 Standard)	DD26.1	Multi-race identification for indicator under 1997 standards.	2011
93	1	Black/African American (1997 Standard)	DD26.2	Multi-race identification for indicator under 1997 standards.	2011
94	1	Asian (1997 Standard)	DD26.3	Multi-race identification for indicator under 1997 standards.	2011
95	1	American Indian/Alaskan Native (1997 Standard)	DD26.4	Multi-race identification for indicator under 1997 standards.	2011
96	1	Native Hawaiian/Pacific Islander (1997 Standard)	DD26.5	Multi-race identification for indicator under 1997 standards.	2011
97-100	4	Reserved for future.		Must be blank.	

Data Dictionary changes:

ELEMENT TITLE:

Race/Ethnicity (1977 Standard)

DEFINITION: Federal 1977 categories used to describe groups to which individuals identify with, or belong in the eyes of the community. The categories do not denote scientific definitions of anthropological origins. A person may be counted in only one group. Resident aliens (holders of Form I-551/155), noncitizens who have been lawfully admitted for permanent residence are to be reported in the appropriate racial/ethnic categories along with United States citizens.

THESE CATEGORIES ARE NO LONGER DETERMINED FOR ALL STUDENTS OR EMPLOYEES AFTER THE 2010 REVISIONS. ALL REPORTING WHICH IS BASED ON THE AY 2010-2011 AND LATER USES THE NEW 1997 STANDARDS ON PAGES 26-26.5. THIS DATA IS CONTINUED TO BE SUBMITTED COLLECTED FOR STUDENTS WHO ENROLLED PRIOR TO 2010 AND REPORTED UNDER 1977 STANDARD.

FORMAT: numeric - 1 digit

CODES:

0 = Unknown
1 = Black (African American), non-hispanic
2 = American Indian or Alaskan Native
3 = Asian/Pacific Islander
4 = Hispanic
5 = White, non-hispanic
6 = Foreign (in EDS 6 = All Other)
7 = All Other (in EDS 7 not used)

COMMENTS: In EDS prior to 2010 reporting, citizenship is used to determine foreign employees. See 2010 Reporting Revisions Recommendations document for more information.

RELATED TO: US Citizenship

GLOSSARY: UNKNOWN, BLACK NON-HISPANIC (1977), ASIAN OR PACIFIC ISLANDER (1977) WHITE, NON-HISPANIC (1977), FOREIGN (1977), ALL OTHER (1977), NATIVE AMERICAN, AFRICAN AMERICAN, HISPANIC (1977)

SYSTEMS: EIS,TSS,HGS,DIS,EDS,AGGR,RTN,FAIS

SYSNAME: RACE

DOCUMENTED: 1/10/77 Revised: 1/30/09

-DD20-

ELEMENT TITLE:

US Citizenship

DEFINITION: The identification of whether a student or employee is a U.S. citizen or not (nonresident alien). The determination of U.S. citizen requires the use of a "group" concept that includes several types of individuals including U.S. citizens, U.S. nationals, resident aliens and other eligible non-citizens.

FORMAT: numeric - 1 digit

CODES: 1 = U.S. citizenship group consisting of U.S. citizens, U.S. nationals, resident aliens and other eligible non-citizens
2 = non-resident alien (also known as foreign)

COMMENTS: There is no allowance for unknown citizenship.
See 2010 Reporting Revisions Recommendations document for more information.

RELATED TO: RACE/ETHNICITY (1977), MULTI-RACE (1997), ETHNICITY (1997)

GLOSSARY: U.S. CITIZENSHIP GROUP, RESIDENT ALIEN, U.S. NATIONAL, NONRESIDENT ALIEN

SYSTEMS: EIS,HGS,AGGR,RTN,EDS,TSS,DIS,FAIS

SYSNAME: CITIZEN

DOCUMENTED: 1/10/77 Revised: 1/30/09

-DD24-

ELEMENT TITLE:

Hispanic Latino Ethnicity (1997 Standard)

DEFINITION:	The identification of whether a student or employee is of Hispanic or Latino ethnicity.
FORMAT:	alphanumeric - 1 character
CODES:	Y = yes to Hispanic or Latino origin N = no to Hispanic or Latino origin blank = not answered or declared
COMMENTS:	See 2010 Reporting Revisions Recommendations document for more information.
RELATED TO:	Race, New multi-race, US Citizenship
GLOSSARY:	U.S. CITIZENSHIP GROUP, RESIDENT ALIEN,
SYSTEMS:	EIS,HGS,AGGR,RTN,EDS,TSS,DIS,FAIS
SYSNAME:	HISPANIC
DOCUMENTED:	1/30/09 Revised:

ELEMENT TITLE:

Multi-race for 1997 Standard

DEFINITION: The student's multi-race responses to the race question of the 1997 two-question format. The data can be directly from the student response (preferred method), an institution mapping of the old 1977 standard or possibly by observer declaration depending upon the data and the institutions procedures.

FORMAT: alphanumeric - 5 character array may be all blank

CODES: The coding is the same in each of the race fields in the array.
Y = yes to the specific race category
blank = not answered or declared

COMMENTS: There is no unknown coding. If the array is blank for all fields the students race is considered to be unknown.
Each individual race field is defined on the pages for:

- White (1997)
- Black or African American (1997)
- Asian (1997)
- American Indian or Alaska Native (1997)
- Native Hawaiian or Pacific Islander (1997)

See 2010 Reporting Revisions Recommendations document for more information.

RELATED TO: US Citizenship, Ethnicity (1997)

GLOSSARY: WHITE (1997), BLACK (1997), ASIAN (1997), AMERICAN INDIAN/ALASKA NATIVE (1997), NATIVE HAWAIIAN/PACIFIC ISLANDER (1997)

SYSTEMS: EIS,DIS,HGS,TSS,EDS,FAIS

SYSNAME: RACEALL

DOCUMENTED: 1/30/09 Revised:

ELEMENT TITLE:

White (1997 Standard)

DEFINITION: The student's response to the White question of the multi-race question of the 1997 two-question format. The data can be directly from the student response (preferred method), an institution mapping of the old 1977 standard or possibly by observer declaration depending upon the data and the institutions procedures.

FORMAT: alphanumeric - 1 character may be blank

CODES: Y = yes to the White race category
blank = not answered or declared

COMMENTS: Only for the one single White race category.
See 2010 Reporting Revisions Recommendations document for more information.

RELATED TO: Multi-race for 1997 Standard, US Citizenship, Ethnicity (1997)

GLOSSARY: WHITE (1997)

SYSTEMS: EIS,DIS,HGS,TSS,EDS,FAIS

SYSNAME: RWHITE

DOCUMENTED: 1/30/09 Revised:

ELEMENT TITLE:

Black/African American (1997 Standard)

DEFINITION:	The student's response to the Race-Black/African American question of the multi-race question of the 1997 two-question format. The data can be directly from the student response (preferred method), an institution mapping of the old 1977 standard or possibly by observer declaration depending upon the data and the institutions procedures.
FORMAT:	alphanumeric - 1 character may be blank
CODES:	Y = yes to the Race-Black/African American race category blank = not answered or declared
COMMENTS:	Only for the one single Race-Black/African American race category. See 2010 Reporting Revisions Recommendations document for more information.
RELATED TO:	Multi-race for 1997 Standard, US Citizenship, Ethnicity (1997)
GLOSSARY:	BLACK (1997)
SYSTEMS:	EIS,DIS,HGS,TSS,EDS,FAIS
SYSNAME:	RBLACK
DOCUMENTED:	1/30/09 Revised:

-DD26.2-

ELEMENT TITLE:

Asian (1997 Standard)

DEFINITION: The student's response to the Race-Asian question of the multi-race question of the 1997 two-question format. The data can be directly from the student response (preferred method), an institution mapping of the old 1977 standard or possibly by observer declaration depending upon the data and the institutions procedures.

FORMAT: alphanumeric - 1 character may be blank

CODES: Y = yes to the Race-Asian race category
blank = not answered or declared

COMMENTS: Only for the one single Race-Asian race category. See 2010 Reporting Revisions Recommendations document for more information.

RELATED TO: Multi-race for 1997 Standard, US Citizenship, Ethnicity (1997)

GLOSSARY: ASIAN (1997)

SYSTEMS: EIS,DIS,HGS,TSS,EDS,FAIS

SYSNAME: RASIAN

DOCUMENTED: 1/30/09 Revised:

ELEMENT TITLE:

American Indian/Alaskan Native (1997 Standard)

DEFINITION:	The student's response to the Race- American Indian/Alaskan Native question of the multi-race question of the 1997 two-question format. The data can be directly from the student response (preferred method), an institution mapping of the old 1977 standard or possibly by observer declaration depending upon the data and the institutions procedures.
FORMAT:	alphanumeric - 1 character may be blank
CODES:	Y = yes to the Race- American Indian/Alaskan Native race category blank = not answered or declared
COMMENTS:	Only for the one single Race- American Indian/Alaskan Native category. See 2010 Reporting Revisions Recommendations document for more information.
RELATED TO:	Multi-race for 1997 Standard, US Citizenship, Ethnicity (1997)
GLOSSARY:	AMERICAN INDIAN/ALASKAN NATIVE (1997)
SYSTEMS:	EIS,DIS,HGS,TSS,EDS,FAIS
SYSNAME:	RAIAN
DOCUMENTED:	1/30/09 Revised:

ELEMENT TITLE:

Native Hawaiian/Pacific Islander (1997 Standard)

DEFINITION:	The student's response to the Race- Native Hawaiian/Pacific Islander question of the multi-race question of the 1997 two-question format. The data can be directly from the student response (preferred method), an institution mapping of the old 1977 standard or possibly by observer declaration depending upon the data and the institutions procedures.
FORMAT:	alphanumeric - 1 character may be blank
CODES:	Y = yes to the Race- Native Hawaiian/Pacific Islander category blank = not answered or declared
COMMENTS:	Only for the one single Race- Native Hawaiian/Pacific Islander category. See 2010 Reporting Revisions Recommendations document for more information.
RELATED TO:	Multi-race for 1997 Standard, US Citizenship, Ethnicity (1997)
GLOSSARY:	NATIVE HAWAIIAN/PACIFIC ISLANDER (1997)
SYSTEMS:	EIS,DIS,HGS,TSS,EDS,FAIS
SYSNAME:	RNHPI
DOCUMENTED:	1/30/09 Revised:

MARYLAND HIGHER EDUCATION COMMISSION

High School Graduation System

Errata Sheet

June, 2000

Graduation Equivalency Diploma (GED) reporting (Page 12)
Beginning with the Fall 2001 submission it is mandatory to report Graduation Equivalency Diploma (GED) recipients for the preceding year. The High School code for GED recipients is 219200 for a Maryland GED and 219400 for an out-of-state GED.

Reporting of students who are Home-schooled
Although it is not mandatory, the Commission encourages institutions to report students that are Home-schooled in the preceding year. If the institution chooses to include home-schooled students, the Home-schooled code should be used (219501).

Update History

The following table lists the update history of printings of this document, together with the respective relapse dates for each edition. The software version indicates the release version of the software product at the time the document was issued. Do not expect a one-to-one correspondence between releases and document editions.

Updates Number	Date	Software Release
Original	April 1992	#1
#1	May 1993	#1.5
#2	July 1997	#1.5
#3	February 2009	#2

TABLE OF CONTENTS

I. Executive Summary

This manual discusses the automated data collection systems used by the Maryland Higher Education Commission in collecting data on Maryland's postsecondary education. These systems collect student enrollment, degree information, and employee information from an institution. Data for each student or employee (based on SSN) is submitted by each institution on computer tapes to the Commission. The procedures, standards, and data element definitions for each data collection are contained within its system manual.

A. Objective

The objective is the collection of student information from all public postsecondary education institutions in Maryland and all independent collegiate institutions which fall under the State aid to independent institutions program. Employee information is collected from public institutions only. These data elements are the basis of information systems that are compatible with the Federal postsecondary education reporting structure, meet the planning and research objectives of the Maryland Higher Education Commission, allow accountability assessment, and provide information for the Maryland Student Outcomes and Achievement Report (SOAR).

B. Description

The collection of unit-record data requires five systems:

- Enrollment Information System (EIS)
- High School Graduate System (HGS)
- Transfer Student System (TSS)
- Degree Information System (DIS)
- Employee Data System (EDS)

Each of these systems contain one record for each reported student. The files contain three types of information.

- Identification Information
- Demographic Information
- Detail Information

The first two types of information are common to all files. The third type is specific to each file's definition and purpose. All three types are explained in the manual for each system.

C. Major Use of Data

- To collect, maintain, and report information on the students enrolled in and graduating from Maryland postsecondary education institutions.

- To provide the Maryland General Assembly with timely and accurate reports of the status of higher education in the State in support of statewide policy decisions.

- To provide data to guide the Commission in making decisions on new program approvals and program discontinuance.

- To provide the supporting data necessary to evaluate the potential impact of Commission policies.

- To analyze the performance of selected groups of students within the Maryland postsecondary education system.

- To analyze the long-term effect of policies within the Maryland system of higher education.

- To maintain the Cohort Tracking System, a longitudinal database of students in the Maryland education collegiate system.

- To report to the U.S. Department of Education the enrollment and degrees conferred data that is annually requested.

- To provide to the U.S. Office of Civil Rights statistical reports and satisfy other data requests.

- To report to the U.S. Equal Employment Opportunity Commission the Higher Education Staff Information (EEO-6) survey.

D. Data Access

The aggregated data reports derived from the student unit-record data systems are considered to be public information. The Commission, however, treats the individual data records as "personally identifiable" and protects these records in accordance with legal requirements and other established policies (see Section II). Institutional researchers and boards are encouraged to utilize these data systems for studies of institutions and/or higher education in Maryland within the limitations set forth in Section II.

E. Benefits

The student unit-record data systems provide valuable benefits by permitting tabulations that are not possible with aggregate data. The common definitions and linkages across the files in the system also produce a more comprehensive and comparable picture of higher education.

Other benefits are:

- The same source of data is used for Institutional studies, Federal reports, and State studies and reports produced by the Commission.

- Flexibility of the information collected enables the Commission to be more responsive to new policy questions and issues. Aggregate data is specific, single-result oriented while unit-record data is multiple-use oriented.

- The ability to link diverse files permits a report or analysis to be understood within the total postsecondary education context.

- Common data definitions provide for file and field consistency. All institutions use the same basis for categorizing each student. The reports are less susceptible to subjective interpretations of definitions and allow comparative analyses among various student groups.

- Error correction is simplified since the inclusion of a student identification number allows a record with an error to be updated. This is preferable to an operating procedure of replacing the whole file when an error is identified.

- The production of trend reports and student profiles by subgroups is possible due to the inclusion of the necessary data elements and a student identification number.

- The consolidation of multiple data requests into primary file requests alleviates some of the data collection burden placed on institutions.

II. Statewide Overview

A. Maryland Higher Education Commission

The Maryland Higher Education Commission is the central policy and coordinating board for higher education in the state of Maryland. The duties and powers of the Commission apply to all state-supported institutions of higher education, including all independent postsecondary education institutions in the State, supported in whole or part by state funds and all community colleges. The governing boards and institutions of the system of higher education in Maryland are obligated to conform to the policies set by the Commission within the authorities delegated to it in statute.

The Commission is responsible for educational policy and issues in the following areas:

- Finance
- Capital construction
- Long range planning
- Program approval, review, reduction, and discontinuance
- Systemwide planning
- Accountability
- State financial aid programs

B. Office of Information Systems

The Office of Information Systems is the component of the Commission that is responsible for data collection and data systems reporting, regarding such areas as student enrollment; formal awards; and employee data. If it fails in its collection task, Information Systems cannot provide relevant information and analyses. These data issues affect its performance:

- value of data
- accuracy of data
- completeness of data
- consistency of data
- timeliness of data

Therefore, it has the following goals:

- To respond to the information needs of the Maryland educational community, in particular to those of the Commission, in a professional and timely manner.

- To achieve simplicity in data collection and reporting procedures that results in high quality data and places a minimum burden upon the reporting institutions.

- To effect the optimum utilization of available resources: Commission staff, institutional and governing board staff, and other state agencies.

C. System Design

The concept of unit-record reporting systems was developed to achieve higher quality data, single data source for each type of data, greater analytical flexibility, and reduction in institutional reporting burdens.

There are four files collected which can be interlinked via the student's identification number:

- Enrollment Information System (EIS)
- High School Graduate System (HGS)
- Transfer Student System (TSS)
- Degree Information System (DIS)

The Enrollment Information System (EIS) is collected as a snapshot of the fall term each year during fall term. It is used to provide:

- data for federal reports; and
- information to assess the current academic year.

The High School Graduate System (HGS) is collected at the end of the academic year and represents an annualized performance summary of the first year of their enrollment. This system provides:

- support for longitudinal studies through cohort based tracing (such as retention, graduation rates, etc.);

- comprehensive information on the progress of high school graduates in their first year of college; and

- complete information for the SOAR feedback to secondary education officials.

The Transfer Student System (TSS) is collected at the end of the academic year and provides data on students who transferred to 4 year colleges from community colleges. This system was developed to provide:

- feedback information to community colleges on the performance of their students after transferring to 4-year college; and

- support for longitudinal based studies.

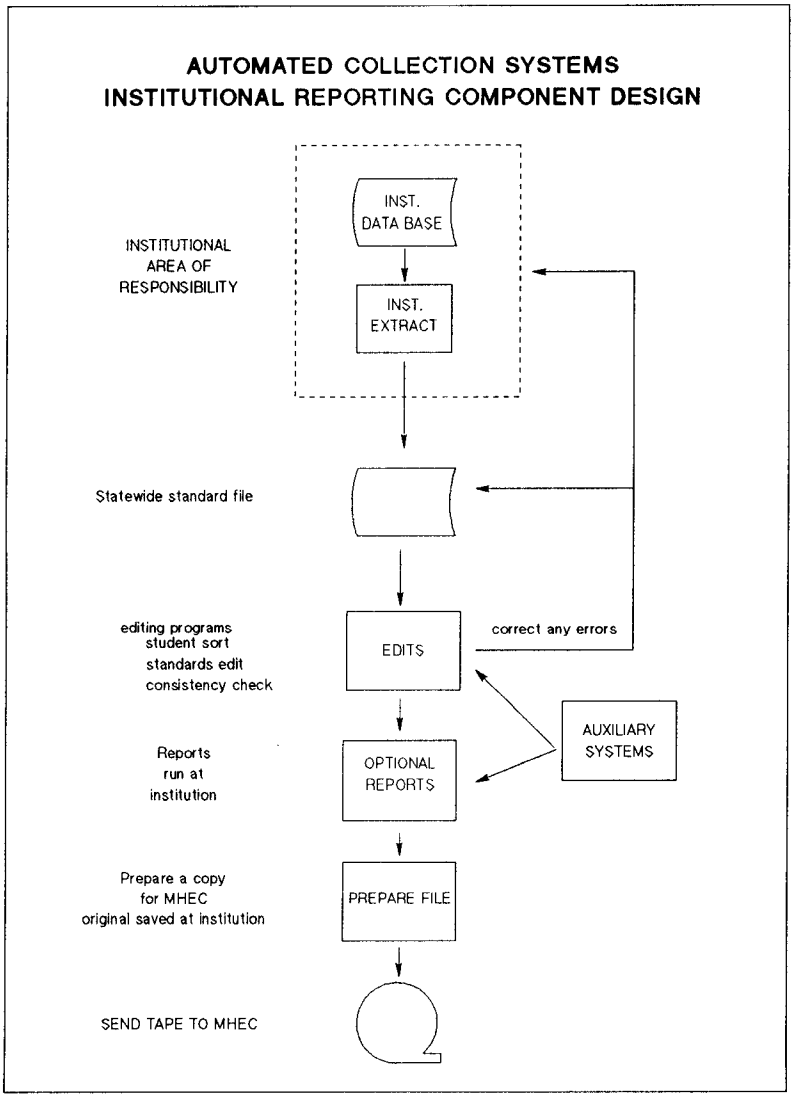
The Degree Information System (DIS) is collected at the end of the fiscal year to provide complete data on all formal awards made during the previous year. This system provides:

- formal award data as an outcome measure;
- complete information on an annualized basis; and
- support for longitudinal studies.

D. System Responsibilities

The responsibility for ensuring the accuracy of the data and the readability of the tapes is primarily that of the institution. Tapes with errors, and tapes that cannot be read may be returned to the institution for correction with appropriate written feedback.

The Commission provides two editing programs for each system. An institution must use these programs for error checking before submitting the tapes. The standards edit identifies all errors when checking against file specifications and provides some basic summaries. The second program is the consistency check which compares the data submitted in the previous year to the current file. This check identifies potential problems for key data elements in the file by flagging percent change differences that exceed threshold values.



Additionally, the Commission provides a set of reporting programs with each system. These programs are run using the

edited file (i.e. has been checked and corrected through the two editing programs) that will be forwarded to the Commission. These programs provide a set of standard Commission reports and several federal facsimile reports. Institutions should run these reports prior to sending the file to the Commission. Their output should be reviewed to insure data correctness and usability. Once the above steps are completed, the file should then be sent to the Commission with the tape submission form (Appendix C). The due dates for each system are published annually in the collection package schedule.

The Commission processes the tape files in the same manner as the institutions. Both an exception edit and consistency check very similar to the institution version are run at the Commission. If errors or data consistency problems are found, the institution will be contacted for error resolution.

The following procedures regarding error resolution are in effect:

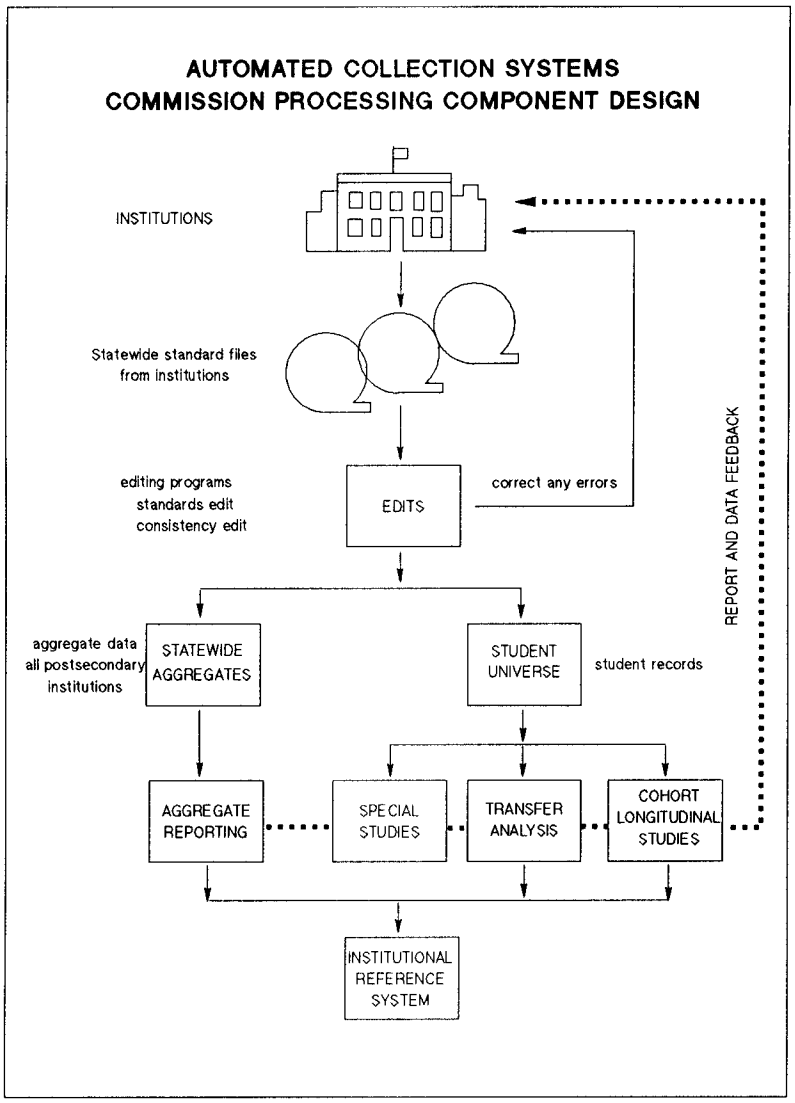
1. Corrections should be submitted in writing, signed, and dated. At the Commission's discretion, telephone corrections may be accepted. Phone conversations will be used to resolve minor problems but institutions with major problems will be required to submit written documentation.

2. All corrections are related to an individual student record or group of records. No aggregate number on a report may be adjusted.

3. Cut-off date for corrections is calculated from the file due date, not from the date of submission.

4. There will be no corrections to any data files for prior reporting cycles. The error resolution/verification period is the appropriate time for an institution to settle any inconsistencies. A file may be resubmitted for the previous year but this re-submission must be pre-approved by Commission staff and be substantiated by significant rationale.

The error resolution/verification phase ranges from four weeks to two months, depending on the Commission's correction cut-off date. It is mandatory that the institution respond within this predetermined period. The cut-off date is determined for each collection cycle and institutions are notified of this cut-off at the time error resolution starts.



The tape submission (signed by the institution) certifies the data and authorizes the Commission to use the data for state and federal reporting, Commission needs (including research), and legislative analysis. The Commission reserves the right to resolve any non-corrected errors on the file should the institution fail to do so. The Commission has the responsibility of notifying the institution that these changes were made to the file. The corrected file is then locked and no further updates can be made to the file. Institutions may request a copy of the final file from the Commission. It is at this point that the data is processed into longitudinal study files and statewide aggregate files.

III. Policy Concerning the Privacy of Personally-identifiable Records

A. Statutory Requirements

The Commission regularly collects, in accordance with its legal responsibilities, information on students and employees of Maryland institutions of postsecondary education. This information is often collected on an aggregated or summary basis, but data on individuals may be collected from student records for the purpose of constructing aggregated or summary reports on given topics. This data on individuals is further used in evaluating and auditing of state-supported programs.

The Commission is granted this collection authority under Title II of the Education Articles of the Annotated Code of Maryland. Specifically, Section 11-105 (f) provides:

> (f) Information; research; inspections, evaluations; assessment of and recommendations for funding. - The Commission:
>
> (1) May secure, compile, and evaluate information on any matter within its authority, in the format it requires, from any person, agency, or institution subject to its authority;
>
> (2) May engage in research, data compilation, and publication of reports concerning postsecondary education in the State;
>
> (3) Through its representatives, may visit at any reasonable times and make reasonable inspections of any institution of postsecondary education subject to its authority.

The pertinent federal statute is the Buckley Amendment, federal statute 20 U.S.C. Section 1232g, that protects the rights of students to insist that their educational records be kept confidential. An amendment in 1979 states that:

> (5) Nothing in this section shall be construed to prohibit State and local educational officials from having access to student or other records which may be necessary in connection with the audit and evaluation of any federally or State-supported education program or in connection with the enforcement of the Federal legal requirements which relate to any such program, subject to the conditions specified in the proviso in paragraph (3). (20 U.S.C. Section 1232g(b) (5))

The proviso referred to in the above paragraph is:

> Provided, That except when collection of personally identifiable information is specifically authorized by Federal law, any data collected by such officials shall be protected in a manner which will not permit the personal identification of students and their parents

by other than those officials, and such personally identifiable data shall be destroyed when no longer needed for such audit, evaluation, and enforcement of Federal legal requirements.

In collecting and maintaining this data, the Commission must follow the relevant state and federal statutes to protect and keep confidential the data collected of individuals. Title 6 Part III (Access to Public Records) of the State Government Articles of the Annotated Code of Maryland requires that an annual report be filed on the Commission's "personal records" and identifies procedures for access to public records.

The provisions of the Buckley Amendment are usually interpreted to allow data on individuals to be collected from student records by a state agency for the purpose of constructing aggregated or summary reports, as long as students are still provided the same protections regarding their rights to privacy as are provided by the institutions providing the data.

B. Commission Policy

The following policy has been adopted by the Commission to guarantee the protections of individuals.

APPENDIX A

SBHE Policy Concerning the Privacy of Student Records Maintained by the Board

(Adopted by SBHE, May 1977)

The Board regularly collects, in accordance with its legal responsibilities, information on students enrolled in Maryland institutions of postsecondary education. This information is often collected on an aggregated or summary basis, but data on individuals may be collected from student records for the purpose of constructing aggregated or summary reports on given topics. With respect to these individual student records:

1. Any personally-identifiable information will consist only of items required for legitimate reports and studies of the Board; specific description of the data possessed by the Board will be provided upon request. Inquiries should be addressed to the Board's offices in Annapolis.

2. Any student, or parent of a student under 18 years of age, may upon application to the Board's offices at 16 Francis Street, Annapolis, Maryland 21401, inspect, review, or seek correction of any records of that student maintained by the Board. The Board will provide copies of such records for a fee equal to the actual reproduction or computer processing costs.

3. The Board will maintain a record of disclosures of personally-identifiable information made from the education records of a student, and will permit a student, or parent of a student under 18 years of age, to inspect that record.

4. If, after an application to correct records is made, and a hearing held thereon, the Board decides that the information contained in its records is not inaccurate, misleading, or otherwise in violation of a student's rights, the Board will inform the student, or parent of a student under 18 years of age, of the right to place in the student's education records a statement commenting upon the information contained in the records, or setting forth any reasons for disagreement with the Board's decision.

5. Copies of this policy will be published annually and will be provided upon request to interested individuals, in accordance with (HEW) Regulation 45 C.F.R. 99.6.

Note: The above policy was developed in consultation with the Attorney General's Office to fulfill requirements of U. S. Title 45, Part 99: "Privacy Rights of Parents and Students." This policy is based upon current regulations and may be changed to meet future legal requirements.

C. Commission Procedures

In addition to the above policy, the Commission staff has established additional measures to guarantee the protection of individuals.

1. Personally-identifiable student and employee record information collected from institutions of higher education except those for State scholarship programs will be maintained using only an encrypted number at the Commission. This encryption insures personal records are not available for direct access from computer files.

2. The encryption of the identifying number will be performed at the institution. This insures the protection of personally-identifiable data at all times after data is released by the institution.

IV. High School Graduate System

A. Objective

The High School Graduate System (HGS) will collect data on the academic performance of high school graduates for their first year of attendance at Maryland colleges and universities.

B. Description

This system was developed by the Commission in 1991 with the advice of a technical steering committee comprised of segment and institution representatives. It was designed to meet the data needs for the high school feedback reports of the Student Outcomes and Achievement Report (SOAR) project and special studies requiring student unit record based data. The system is scheduled for its first collection from public institutions in 1992 for academic year 1991-92.

The Student Outcomes and Achievement Report (SOAR) will provide feedback to Maryland high schools on the academic performance of their graduates in their first year of attendance at Maryland colleges and universities. The High School Graduate System will be implemented to collect data from colleges on those students who enrolled in either summer, fall and/or spring semesters of the reporting year in a Maryland higher education institution and graduated from high school in the preceding year. The data collected will be combined on a statewide basis and processed into the SOAR high school feedback reports.

C. Selection Criteria

All students enrolled in the institution in any semester of the reporting year who graduated from high school in the preceding year should be included on the HGS data submission. Only students who received a high school diploma are to be considered as graduated from high school. Graduation Equivalency Diploma (GED) recipients for the preceding year do not have to be included. If the institution chooses to include GED people, the GED code should be used for the high school. Students should be included even if they:

- Enrolled in any off-campus center or branches.
- Exclusively audited classes.
- Exclusively attended remedial courses.
- Attended any semester in reporting year regardless of outcome.

Students are to be excluded from this submission if they are:

- Studying abroad where enrollment at the institution is only an administrative record and the fee is nominal.

- Enrolled exclusively in non-credit continuing education courses.

- Concurrently enrolled and not graduated from high school.

An example of a student reported in the 1992 collection cycle (the tape submission for the Fall 1992 due date) is as follows. Since this system collects data on the first year of college, the student would have graduated from high school in the year preceding his/her first year of college (the reporting year). This means that the student would have graduated in June, 1991 (in the academic year (AY) 1990-91) and would have enrolled at any time in the AY 1991-92 at the reporting institution.

D. Collection Requirements

This data collection will be due each September 1 as a part of the MHEC Annual Collection package. Data will be collected at this time on the prior academic year's reporting period. The data will be provided on tape to the Commission from every public institution in Maryland starting in 1992 for the 1991-92 academic year. Independents will be required to participate in future collections.

Each institution, branch, campus or other entity separately certified by the Accreditation and Institutional Eligibility Unit of the U.S. Office of Education, with its own FICE code, and listed separately in the Education Directory - Higher Education, should be reported separately and not included or combined with any other such certified unit. Students at branches, campuses and other organizational entities not separately certified should be included on the appropriate campus or branch tape.

Each time a tape is submitted it must be accompanied with a completed "Institutional Certification and Specification Form for Automated Submission" (see Appendix C). This form provides the institution with the preferred tape specifications as well as a mechanism to transmit the actual tape creation specifications to the Commission. More importantly, this form is used by the institution to certify the data submitted. The individual signing the certification should be authorized to do so by the institution. This individual is responsible for the review of outputs from the edits and any optional system reports to ensure that the data being submitted is correct.

E. System Design

The system provides academic performance data on each high school graduate. This is accomplished by the development of a standard reporting format and definitions for this data. The following is the format for data required on the tape for each student:

High School Graduate System (HGS) Record Description

Data Element	Description	Length	Position	Data Dict page reference
Collection Year	collection cycle year submitted e.g. "1992"	4	1-4	DD1
Collection Period	always = "9" for annual	1	5	DD2
FICE	federal code number for reporting institution	6	6-11	DD3
Sub-campus Code	code for institution use for multi-campus or organizational identification	1	12	DD4
Identification Number	student's social security number on institution copy and encrypted number on tape submitted	9	13-21	DD5
Identification Number Type	code to indicate whether an actual SSN or an institution assigned student number was used	1	22	DD6
Race/Ethnicity	standard codes for ethnic categories	1	23	DD20
Gender	standard codes for male, female and assigned unknowns	1	24	DD21
Degree Sought	standard codes to identify degree level being sought or non-degree seeking	2	25-26	DD30
Program Taxonomy	MHEC taxonomy for the student's most recent program area, last two positions always blank and for expansion	8	27-34	DD31
Fall Attendance	standard codes for attendance in fall semester	1	35	DD33
Spring Attendance	standard codes for attendance in spring semester	1	36	DD34

Admission Exemption Flag	code to indicate how student first admitted in reporting period	1	37	DD38
High School Code	based on College Board school codes	6	38-43	DD40
Cumulative Native Credit Hours Earned	current credit hours completed at reporting institution, in format 62.5 = "0625"	4	44-47	DD44
Cumulative GPA	student's current grade point average as defined by institution, in format 3.52 = "352"	3	48-50	DD52
Math Remedial Assessment	standard remedial code	1	51	DD45
English Remedial Assessment	standard remedial code	1	52	DD46
Reading Remedial Assessment	standard remedial code	1	53	DD47
First Math Grade	letter grade of student's first math credit course	1	54	DD48
First Math Course ID	institution's course identifier of student's first math course	9	55-63	DD49
First English Grade	letter grade of student's first English credit course	1	64	DD50
First English Course ID	institution's course identifier of student's first English course	9	65-73	DD51
SAT Math Score	score set used by institution	3	74-76	DD53
SAT Verbal Score	score set used by institution	3	77-79	DD54
ACT Math Score	score set used by institution	2	80-81	DD56
ACT English Score	score set used by institution	2	82-83	DD55

ACT Reading Score	score set used by institution	2	84-85	DD57
ACT Science Reading Score	score set used by institution	2	86-87	DD58
ACT Composite	score set used by institution	2	88-89	DD59
Filler	for expansion, always blank	11	90-100	

There are relationships between data elements in the HGS file that indicate data acceptability and meaning. The editing process requires that certain groups of elements be present if any one of them is provided. This occurs for the following:

Group
First English Grade, First English Course
First Math Grade, First Math Course
SAT Math Score, SAT English Score
all ACT Scores including Composite

The only other elements in the HGS which have a relationship are Cumulative GPA and Cumulative Native Credit Hours Earned. The acceptable combinations and their meanings as related to certain student enrollment conditions are indicated in this table.

Cumulative Native Credit Hours

Cumulative GPA	0	>0
blank	exclusively remedial exclusively auditor withdrew all courses	exclusively in pass/fail courses and passed at least one course
0	failed all credit courses	INVALID
>0	INVALID	typical enrollment

Examples of typical entering high school graduates to both a community college and a four year university are provided to indicate differences in reporting. The student entering the community college was a white male who graduated from Annapolis Senior High and attended Anne Arundel Community College the first year. He was not seeking a degree and enrolled as a undeclared major for six credit hours in both the fall and spring semesters. He did not take the SAT or ACT tests but was assessed and only needed remediation in English. At the end of the first year he achieved a GPA of 2.1 and took his first English credit course (ENG 101) with a grade of C.

Another student was an Hispanic female who graduated from Overlea High and attended UMBC her first year. She was seeking a bachelor's degree in social work and attended full-time (12 credit hours per semester). She took the SAT and received a

verbal of 650 and a math of 400. At UMBC she took the remedial course in math but assessment information was unavailable. At the end of her first year, she achieved a GPA of 3.1 and took both her first English (grade A) and math (grade C) credit courses.

Data Element	Community College	4-year
Collection Year	1992	1992
Collection Period	9	9
FICE	002058	002105
Sub-campus	-	-
Identification Number	29AB54C--	30CE2F1--
Identification Type	-	-
Race	5	4
Gender	1	2
Degree Sought	47	40
Program Taxonomy	909901	210400
Filler	--	--
Fall Attendance	2	1
Spring Attendance	2	1
Admission Exempted Flag	-	-
High School Code	210008	210147
Cumulative Credit Hours	0120	0240
Cumulative GPA	210	310
Math Remedial Assessment	1	3
English Remedial Assessment	2	-
Reading Remedial Assessment	1	-
First Math Grade	-	C
First Math Course ID	---------	MATH101--
First English Grade	C	A
First English Course ID	ENG101---	ENG103---
SAT Math Score	---	400
SAT Verbal Score	---	650
ACT Math Score	--	--
ACT English Score	--	--
ACT Reading Score	--	--
ACT Science Reading Score	--	--
ACT Composite Score	--	--

Note: in above example, "-" means a blank and is shown for illustration purposes only. Do not fill fields with "-".

In the special case of high school students who were concurrently enrolled at your institution prior to their graduation, special rules apply to the first math and English grade and course data elements. In this case the student may have taken the first course prior to the reporting period (in the preceding year in which they also graduated). The institution should take steps to search, in this case, for the first course information in the preceding year enrollment information. The objective is to gather the first course data regardless of the fact that these students took the course prior to the reporting period.

The Commission provides a software distribution package to each institution for this system. The package consists of two components, processing and reporting (discussed in next section). The processing component consists of five software programs. The five programs and their major functions are:

XHGSXTR	-	extraction model	This program is provided only as a template for the extraction program. This is the only program that must be written by the institution to access its data environment, do code conversions, and produce the HGS standard format file.
XHGSSRT	-	sort program	A program which sorts file into required order for editing and processing.
XHGSEDT	-	standards edit	The basic edit of the institution produced tape compared to the statewide HGS standards are performed by this program. A report for each student record in error is produced.
XHGSCON	-	consistency check	The current tape submission is compared to the previous year's submission. A report comparing the two submissions for consistency is produced.
XHGSTRF	-	tape transfer	This is a utility program which encrypts the SSN of students for subsequent transmission to the Commission. It can also be run to decode the SSN.

The XHGSEDT and XHGSCON are important programs that an institution must run to verify acceptable data quality. The edit reports from these two programs should be reviewed by the appropriate institution personnel who can assess data accuracy.

In order to meet the tape submission requirements, the institution is required to run this processing component of the system to extract, edit, and prepare the file for submission to the Commission. This set of programs will provide the minimum level of data quality control required.

F. Institutional Reports

The Commission distributed software package provides several optional reporting programs. The programs provide institutions with the information on the students being submitted for two major purposes. First, the reports can be used to

further assure that the data being submitted is correct. Secondly, the reports provide basic information for the institution's own reporting needs. Third, the reports provide additional details from which further analysis can be made of statewide summaries. These optional reports are for institution use and should not be sent to the Commission.

There are two optional reports for the High School Graduate System. These reports provide the ability to the institution to examine the performance of high school graduates at their institution. The reports can also be used to provide additional feedback to the high school supplementing the SOAR High School Principal Report. The two reports and their major function are:

XHGSIR	-	performance report	This program provides a detail analysis of high school graduates and their academic performance. A report consisting of a set of tables can be produced for each individual high school selected via program options. A college summary report of all high school graduates may also be produced.
XHGSSSN	-	student report	This is a complete list of the HGS data as reported for each student. It is provided in identification number order. It can be used to provide student case level institution analysis and/or feedback to high schools.

It is recommended that these programs be utilized by the institution to support both detailed and case level analysis of the performance indicators used in the SOAR high school principal feedback report. High schools are encouraged to contact your institution for further information or questions on the indicators provided by your institution.

G. Audit

The Commission does not routinely audit the HGS data submission. The Commission staff reserves the right to audit this data upon request to the institution. Because routine audits are not used, the institution must take extra care in the editing and review of the data.

V. Institution Procedures

A. Software Installation

The software installation for the HGS system requires six steps to be performed by data processing personnel at the institution. It is suggested that staff skilled in installing COBOL software packages, reading foreign tapes, and using system utilities to sort and print files be involved in this installation. The complete installation process (except for the writing of the extraction program) should be expected to take skilled staff 2-3 days. The HGS steps are:

1. account setup;
2. installation/update tape loading;
3. software modification;
4. installation of two auxiliary systems;
5. run command setup; and
6. software test.

The installation of the two auxiliary systems (Institutional Academic Program Inventory and the High School File) is necessary to fully operate and maintain the HGS system. Separate manuals are available for each of these systems.

1. Account Setup

The institution should establish a single account (or directory unit) on its computer system for all MHEC distributed software. The use of this account will simplify procedures to maintain software provided by MHEC, provide organization to separate MHEC software, allow a place for the retention of files submitted to the Commission and permit implementation of installation security measures on both software and data files. It is suggested that within this account structure each Commission system be identified separately.

All files loaded onto the system can be renamed to meet institutional standards. The table in the next section can be completed to provide a cross reference to internal file names.

2. Installation/Update Tape Loading

The HGS system is supplied on an open-reel computer tape in two different ways. If your institution has never received and installed HGS, you will receive an install tape. The complete instructions for the initial installation of HGS are contained in this manual. The second way HGS is supplied is through an update tape. This method is used to provide updates to your institution where HGS was previously installed. Each update tape contains only those system components that need to be modified. The update tape will upgrade the HGS system from the previous release to the current one. The update tape is described in the release update instructions that accompany the tape. These update

instructions combined with the current manual provide the necessary information to update HGS.

The HGS install tape provides multiple files containing the source software, test files, and sample outputs. The following is a list of files on the tape, the file number and file characteristics. A fill-in blank is provided to enter the file names used at the institution.

File Number	File Name - Contents Software Version Date		File Characteristics Record Length	Number Records	Your Assigned File Name
1	XHGSXTR	extract model prg 04/15/92	80	484	_____
3	XHGSSRT	student sort prg 04/15/92	80	95	_____
5	XHGSEDT	standards edit prg 05/01/93	80	2656	_____
7	XHGSCON	consistency chk prg 05/01/93	80	2943	_____
9	XHGSIR	performance rpt prg 05/01/93	80	3185	_____
11	XHGSSSN	student report prg 05/01/93	80	1229	_____
13	XHGSTRF	tape transfer prg 04/15/92	80	601	_____
15	THGSBAD	edit test file	100	61	_____
17	THGSPRV	previous test file	100	58	_____
19	THGSD	test file	100	62	_____
21	THGSEDT	edit test sample	132	429	_____
23	THGSCON	consistency test sample	132	252	_____
25	THGSIR	performance test sample	132	243	_____

The install tape is 1600 BPI, unlabelled, 9-track, open reel and contains multiple files. Each file is written on the installation tape twice, first in ASCII and then repeated in EBCDIC. **All ASCII files are odd numbered and EBCDIC files are even numbered.** File numbers shown above are for ASCII files. All files are fixed length and fixed block with a blocking factor of 1 (block size = physical block length = record length). The first seven files on the tape contain source code for COBOL (ANSI-74) programs. The next three files (8-10) are test files containing data in HGS test format. The last three (files 11-13) are sample outputs from runs of the test files through programs and can be used to verify installed software. These files are 132 in length and do not contain pagination (carriage) control.

Each of the tape files should be copied using your system's standard file copy utility for foreign tapes. Contents of files can also be checked with a system utility after loading. If you have any problems reading the tape, please contact the Office of Information Systems of the Maryland Higher Education Commission.

3. Software Modification

The COBOL programs provided by MHEC, except for the extract model, must have installation specific modifications made to source code and then compiled/linked at the institution's computer facility by programmer support staff. The COBOL programs are ANSI-74 standard level and designed to be as portable as possible. If the procedures given here are followed and the program will not compile or execute properly, please call the MHEC Office of Information Systems for assistance.

The extract model is the only COBOL program that MUST BE WRITTEN by the institution's programmer support staff. The program on the tape, XHGSXTR, is not a complete program and is provided to the institution only as an aid to its programming effort. Because of the varying hardware platforms and variety of student systems in operation at Maryland colleges and universities, the knowledge to extract specific data resides within each institution. It is this expertise that the institution and staff must provide to implement this system at its site. The extraction program must be developed to meet the Commission's system design format and collection requirements (see section IV. E and IV. C of this manual, respectively). These should be reviewed carefully by the institution staff prior to development of an extraction program. The overall objective is to extract standard performance data on the previous year's high school graduates at the end of their first academic year at a college. This data provides a mechanism to assess the success of academic preparation by high schools.

There are several steps for programming staff to follow to install (compile/link) each of the other six pre-written programs:

1. You should not resequence the program statement numbers during its installation. Updates and patches will be supplied using the original MHEC numbers.

2. Any changes needed in the IDENTIFICATION DIVISION for your installation can be made. It is suggested that you supplement existing program lines and not replace them.

3. The OBJECT-COMPUTER paragraph of the ENVIRONMENT DIVISION can be changed as necessary for your installation.

4. The SPECIAL-NAMES paragraph of the ENVIRONMENT DIVISION contains the printer control for a new page. The function name TOP can be changed, if needed, to your system's proper name for advancing to the top of a new page.

5. In the FILE-CONTROL paragraph of the ENVIRONMENT DIVISION, the SELECT clause must be changed as necessary for your installation. Depending on your

system, file parameters can be placed within the SELECT clause, the FD (or SD) paragraph of the FILE SECTION or in your system command language. File parameters are given in the run command setup section later in this manual.

6. The FD (or SD) paragraphs of the DATA DIVISION FILE SECTION can be changed as necessary for your system. Any requirements for BLOCK CONTAINS, RECORDING MODE, LABEL or other institution specific clauses should be placed here.

7. In some institutions (typically IBM@), the files used for print output (FD LPRNT-FILE) must have additional changes made to this FD paragraph of the FILE SELECTION. First, change the RECORD CONTAINS to 133 CHARACTERS. Next, add a one-byte filler after the 01 LPRNT-REC statement. The resulting changed FD would appear as:

```
01  LPRNT-REC.
    02  FILLER      PIC X.
    02  PRINT-REC   PIC X(132).
```

8. There is a part of WORKING-STORAGE section identified as INSTALLATION DATA. This area must have several required changes made as well as some optional institution specific ones. Programs will not operate correctly at your institution unless these changes are made. The data names and changes are as follows:

MARGIN-TOP	set to number of blank lines needed at top of page
MAX-LINES-PAGE	set to the maximum number of lines per page
INSTALLATION-NAME	enter and center your college's name
INSTALLATION-FICE	set to your college's FICE (see DD3)
INSTALLATION-SECTOR	set to describe your college as 1=public, 2=private
INSTALLATION-COLLEGE-TYPE	set to describe your college as 2=2-year, 4=4-year

4. Installation of Auxiliary Systems

The HGS system requires the presence of two auxiliary systems. One system is the institution program inventory which

is your institution's part of the MHEC academic program inventory. This is used to edit program data supplied in the standard record and to obtain your institution's program titles for edit and reporting software. This program inventory system also contains a testing version of the program inventory file. This test version is used for all software tests in step 6. The second system consists of the MHEC high school file. This file is a list of all high schools and their codes. It is used in the same manner as the institution program inventory.

Both of these auxiliary systems must be installed according to their system manuals. A report program is provided as part of each system to allow institutions access to this data.

Once all software tests have been completed, the run setup commands must be altered to have all programs that access the program inventory use the actual program inventory file provided by MHEC. This reference to the actual file is then kept as part of the permanent run commands for the installed system.

5. Run Command Setup

In order to test the software and prepare for running the system each year, this section provides the proper setup information and running requirements to set up the necessary command language on your system. There are seven basic command sets, one for each program in the system. Each set of commands requires a program execution command and a file reference command for each file used by the program. Sort work files may require additional file commands for additional temporary work files. The print files would normally be directed to your spooled printer. They are all 133 characters in length, including the carriage control position. These command sequences can be combined into fewer steps depending on the needs and preferences of your college. The following table provides the setup information for all files (default SELECT assign name) used by each program. The MHEC file name used by the program is listed along with space for you to provide your institution assigned file name. You must provide other system requirements on file reference commands.

Program/File		Description	Input/ Output	File Size	Record Length
YOUR XHGSXTR		your extraction			
INSTDB	_____	your student DB	input	?	?
HGSXT	_____	standard HGS	output	4000	100
XHGSSRT		student sort			
HGSXT	_____	unsorted HGS	input	4000	100
HGS	_____	sorted HGS	output	4000	100
HGSSORT	_____	sort work	I/O	4000	100
XHGSEDT		standards edit			
HGS	_____	sorted HGS	input	4000	100
PRINTER	_____	edit report	print	unlimited	133

IPINV	_____	program inventory	input	500	80
IHSIN	_____	high school file	input	500	192
XHGSCON		consistency check			
HGS	_____	edited HGS	input	4000	100
HGSPREV	_____	previous HGS	input	4000	100
PRINTER	_____	consistency rpt.	print	unlimited	133
IPINV	_____	program inventory	input	500	80
IHSIN	_____	high school file	input	500	192
HGSSORT	_____	sort work	I/O	4000	100
XHGSIR		performance report			
HGS	_____	edited HGS	input	4000	100
PRINTER	_____	performance rpt.	print	unlimited	133
IPINV	_____	program inventory	input	500	80
IHSIN	_____	high school file	input	500	192
HGSSORT	_____	sort work	I/O	4000	100
accepts	_____	system input file	input	-	80
XHGSSSN		student report			
HGS	_____	edited HGS	input	4000	100
PRINTER	_____	student report	print	unlimited	133
IPINV	_____	program inventory	input	500	80
IHSIN	_____	high school file	input	500	192
HGSSORT	_____	sort work	I/O	4000	100
HGSWORK	_____	temporary work	I/O	4000	100
XHGSTRF		transfer program			
HGS	_____	edited HGS	input	4000	100
HGSMHEC	_____	MHEC file	output	4000	100

In the above table, defaults are given for certain file sizes. Your institution's HGS file may be smaller than the default and 4000 can be changed to a more appropriate number. The printer files are 132 characters in length plus one additional character for carriage control.

The student sort can be replaced by a system sort utility. If a utility is used, the HGS file must be sorted in ascending order on Identification Number (SSN) field in positions 13-21.

The file created by the transfer program should be sent to MHEC on tape. This file should be discarded after tape load. The edited HGS should be saved at your institution as it will be needed in the next year's process to do consistency check and for institution running of optional reports during the year to provide additional feedback to the high schools.

6. Software Test

Once the software has been compiled and the command setup is completed, the software can be tested using files on the install tape. The output generated by using the furnished test files can be compared to the test samples provided. The test samples do not have carriage control and therefore will not show pagination when printed. When comparing your output to the test

sample ignore pagination. These test output files were generated at MHEC using the same test files provided on the installation tape.

The following table shows the run command setup for performing the testing step.

Software Testing Setup

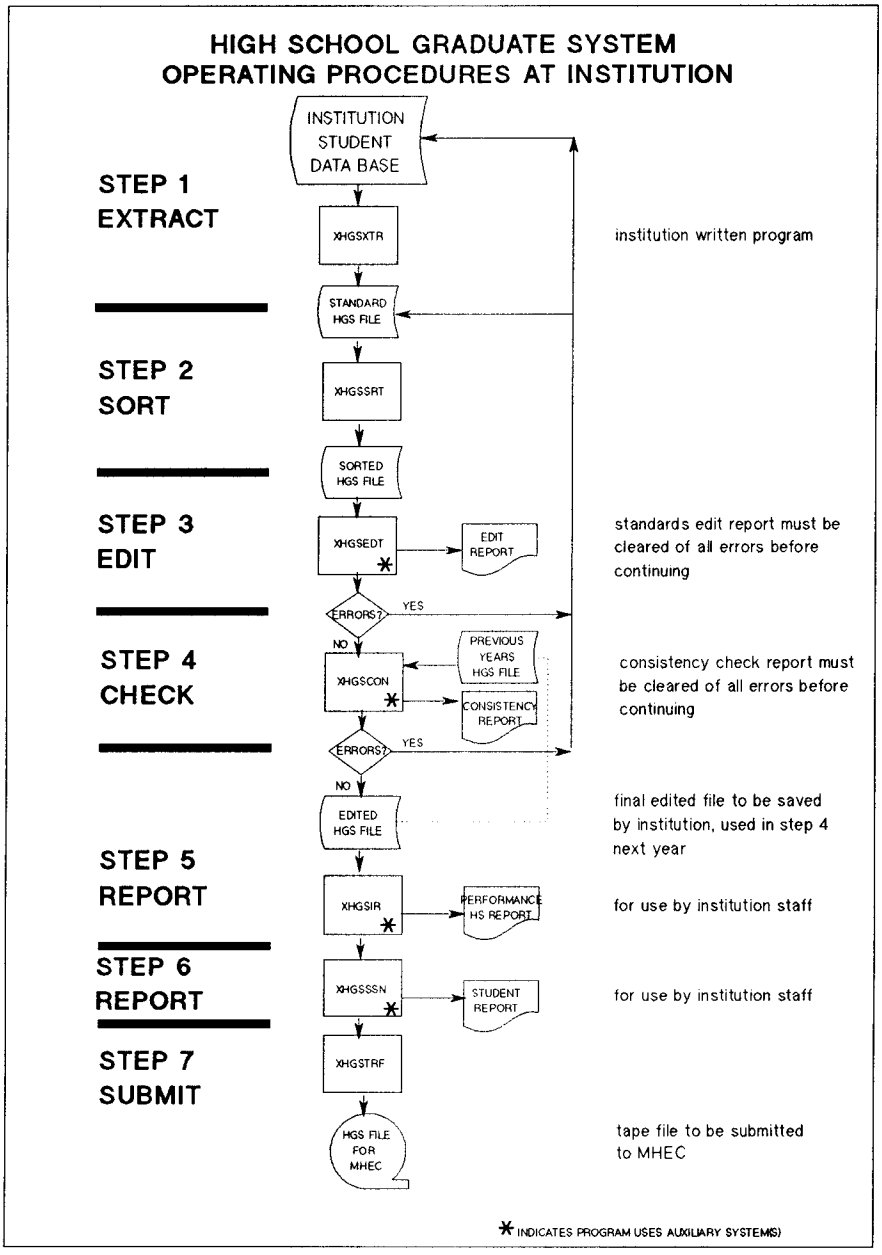
Program/File	MHEC File Name for Testing	Your Assigned File Name	Comparison File Name for Output
XHGSEDT			
HGS	THGSBAD	_____	
PRINTER	output created	_____	THGSEDT
IPINV	TIPTEST	_____	
IHSIN	IHSINVD	_____	
XHGSCON			
HGS	THGSD		
HGSPREV	THGSPRV	_____	
PRINTER	output created	_____	THGSCON
IPINV	TIPTEST	_____	
IHSIN	IHSINVD	_____	
HGSSORT	work file	_____	
XHGSIR			
HGS	THGSD	_____	
PRINTER	output created	_____	THGSIR
IPINV	TIPTEST	_____	
IHSIN	IHSINVD	_____	
HGSSORT	work file	_____	

There are three test files provided with HGS. In order to properly run these tests, the programs tested must use the test version, TIPTEST, of the institution program inventory file instead of the actual institution program inventory. The first, THGSBAD, contains a HGS file with erroneous records. It should be used to test the edit, XHGSEDT, and the output created compared to printed THGSEDT file. The test files THGSPRV (previous year HGS file) and THGSD (current year edited file) should be used as input to the consistency check, XHGSCON. The output from this run should be compared to the test sample file THGSCON. The HGS test file, THGSD, should be used to test the performance report, XHGSIR, using the option selection of "S" and the output compared to the test sample THGSIR. If any of these comparisons show differences in the output besides pagination, please call the MHEC Office of Information Systems for assistance.

Remember to change any testing commands to point to production files after testing is complete.

B. Operating Procedures

The overall operation of the system starts with yearly extraction of the HGS data at the end of an institution's academic year (usually June). It is completed when the tape is created and submitted to MHEC. The optional reports can be run at any time depending on institution needs.



Step 1 EXTRACT

The extract program, which is the only program required to be written by the institution's programming staff, must be run at the end of each academic year. The academic year is defined by the institution but usually ends after the spring semester. This means that the extract program must be run each year in the early

June period. It then captures the high school graduates performance data after their first year of college. The extract program will access the institution's student data base, extract the prior year's high school graduate data, put this data into standard HGS format and save this standard HGS file.

While the remaining steps can be run at any time prior to submission of the data tape to the Commission, the extract must be run at the appropriate time each year to obtain the correct data and required time period.

Step 2 SORT

The next step is to process the standard HGS file produced by the extract by sorting of file into identification number order. This can be done by using the program provided or a system utility sort. If using a utility sort, the sort is on positions 13-21 in ascending order. This sorted file should be saved for the next step. The input file can be deleted or saved depending on institution's needs.

Step 3 EDIT

The sorted file is then used as input into the standards edit program. This program will edit the sorted HGS file to the system standards in this manual. It produces an edit report which should be reviewed by appropriate institution personnel responsible for the data being submitted. The edit report produced is in two parts: unit record edit and frequency distribution checks on basic data. The unit record part will indicate each record in error. This report shows several items for each erroneous record: record number in file, the identification number, type of error, data field in error and the error condition. The type of error is either WARNING or FATAL. WARNING means the data is suspicious but not necessarily incorrect. These errors should be checked for validity. The FATAL errors are unacceptable and must be corrected in the file. DO NOT PROCEED PAST EDIT STEP UNTIL ALL ERRORS AND DATA FREQUENCIES HAVE BEEN REVIEWED AND CORRECTED WHEN NECESSARY. The HGS file can be corrected by institution's use of either a system text editor to correct extracted standard HGS file or by correcting the institution's data base and rerunning the extract.

Step 4 CHECK

Once all errors have been resolved, the consistency check program can be run on the file that has passed the EDIT step. In order to function completely, this program requires both the current and prior year's (saved by institution) HGS files. Since for the first year there is no prior year's data, the program reports only one current year's data and cannot provide consistency checks to prior year's submission. The consistency report must be reviewed by appropriate institution staff responsible for the data being submitted. Any errors, whether displayed by program or found in the institution review, must be

corrected and the process restarted in the same manner as the EDIT step.

Upon completion of this step, the institution will have the edited HGS file ready for submission to MHEC (or to your segmental coordinator). **IT IS THIS FILE THAT SHOULD BE PERMANENTLY SAVED BY THE INSTITUTION.** It will be required for next year's consistency check (step 4), as backup to allow tape resubmission, and for the optional report programs in steps 5 and 6.

Step 5 REPORT

The report from the XHGSIR program provides detail information on the performance of high school graduates at your institution. The final edited file is used by this program to produce the report. The report is a set of 4 pages of tables provided for either all high school graduates in file (one year's graduates) or for each of the selected high schools. The program uses prompts to the standard input device (COBOL displays and accepts) to obtain selection criteria. When running this program, three different selections can be made: (1) produce institution summary of all high schools, (2) produce only those table sets for high schools with number graduates greater than the value inputted, or (3) produce a table set for a single high school selected by high school code inputted. In selection (2), using an input value of zero will cause a report to be produced for every high school. Since a four page report is produced for even one student, care should be taken in using this option as it could produce several hundred pages of output.

This report and the report from Step 6 can also be used to check for errors that would not appear until data is analyzed and presented in detail breakdowns.

Step 6 REPORT

The report provided by the XHGSSSN program provides a complete data dump for all students. The report can be used by the institution for case level examinations of the data. Individual student data contained in a detailed report cell can be examined using this report.

Step 7 SUBMIT

The final step in the system is the submission of a tape containing the HGS data to MHEC. The transfer program reads the final edited file and produces a copy of the institution's saved version with encrypted identification numbers. This encrypted file should be loaded on tape using the tape submission form requirements in Appendix C. The tape and the completed submission sheet must be sent together to MHEC. The tape submission form must be certified by the appropriate institution staff responsible for the data being submitted. This certification represents the institution's responsibility for the data.

VI. Appendices

Appendix A
Data Dictionary

Data Dictionary Contents

MARYLAND HIGHER EDUCATION COMMISSION
DATA DICTIONARY

ELEMENT TITLE:

Collection Year

DEFINITION: A collection cycle year (e.g. 1992) for data collected. The collection cycle year is the calendar year used to identify the data collection and is based on annual collection schedule.

FORMAT: numeric - 4 digits

CODES:

COMMENTS: Use the collection cycle year. For example, in the 1992 collection cycle data is collected
EIS - snapshot of 1992 fall semester
TSS - annual collection for 91-92 academic yr.
DIS - annual collection for 91-92 academic yr.
HGS - annual collection for 91-92 academic yr.
Some systems may use only 2 digit year, check system manual.

RELATED TO: Collection Period

GLOSSARY:

SYSTEMS: TSS,HGS,EIS,DIS,EDS,AGGR

SYSNAME: COLYR

DOCUMENTED: 1/10/77 Revised:

ELEMENT TITLE:

Collection Period

DEFINITION: The period of collection of the data to distinguish different types and time periods.

FORMAT: numeric - 1 digit

CODES: 1 = fall snapshot
9 = annual (academic year)

COMMENTS: Fall snapshot freeze date is determined by the institution. This date must be after the end of the institution's official drop-add period for fall semester.

Annual period is for academic year which includes summer, fall and spring enrollment cycle.

EIS uses a 2 digit number "01".

GLOSSARY: academic year

RELATED TO:

SYSTEMS: TSS,HGS,EIS

SYSNAME: COLPD

DOCUMENTED: 1/10/77 Revised: 5/20/91

MARYLAND HIGHER EDUCATION COMMISSION
DATA DICTIONARY

ELEMENT TITLE:

FICE

DEFINITION: A unique federal identification code for each institution. These are assigned by the U.S. Department of Education.

FORMAT: numeric - 6 digits

CODES: uses the Federal Interagency Committee on Education code for institutions see next page

COMMENTS:

RELATED TO:

GLOSSARY:

SYSTEMS: EIS,TSS,HGS,DIS,IPINV,EDS

SYSNAME: FICE

DOCUMENTED: 1/10/77 Revised: 5/10/93

FICE	
002057	Allegany Community College
002058	Anne Arundel Community College
002061	Baltimore City Community College
031007	Carroll Community College
002063	Catonsville Community College
008308	Cecil Community College
002064	Charles County Community College
004650	Chesapeake College
009935	Dundalk Community College
002070	Essex Community College
002071	Frederick Community College
010014	Garrett Community College
002074	Hagerstown Junior College
002075	Harford Community College
008175	Howard Community College
002082	Montgomery College - Rockville
002081	Montgomery College - Takoma Park
029074	Montgomery College - Germantown
006911	Montgomery College - Central Admin.
002089	Prince George's Community College
020739	Wor-Wic Community College
002062	Bowie State University
002068	Coppin State College
002072	Frostburg State University
002091	Salisbury State University
002099	Towson State University
002102	University of Baltimore
002104	Univ. of MD - Baltimore City
002105	Univ. of MD - Baltimore County
002103	Univ. of MD - College Park
002106	Univ. of MD - Eastern Shore
011644	Univ. of MD - University College
007959	Univ. of MD - System Administration
002083	Morgan State University
002095	St. Mary's College of Maryland
002060	Baltimore Hebrew University

FICE	
023148	Baltimore Int'l Culinary College
001436	Capitol College
002067	Columbia Union College
029192	Eastern Christian College
002073	Goucher College
007662	Hagerstown Business College
*	Harry Lundeberg School Seamanship
002076	Hood College
002077	Johns Hopkins University
002078	Loyola College
021551	Maryland College of Art & Design
002080	Maryland Institute College of Art
002086	Mount St. Mary's College
002087	Ner Israel Rabbinical College
002065	College of Notre Dame of Maryland
902077	Peabody Institute of the JHU
*	Potomac College-
002092	St. John's College
002096	St. Mary's Seminary and University
021279	Sojourner-Douglass College
025784	*Traditional Acupuncture Institute
002107	Villa Julie College
001462	Washington Bible College
002108	Washington College
010065	Washington Theological Union
002109	Western Maryland College

* means no federal FICE assigned

ELEMENT TITLE:

Sub-campus Code

DEFINITION: A code that allows a breakdown within institution or is used to classify students into groups. Usually an institution defined data element for its own needs.

FORMAT: alphanumeric - 1 character

CODES: blank = not used
any letter or number = institution (or MHEC) assigned code

COMMENTS: When necessary, MHEC may require certain institutional breakdown and use of this field.

RELATED TO:

GLOSSARY:

SYSTEMS: EIS,TSS,HGS,DIS,EDS

SYSNAME: SUBCAMP

DOCUMENTED: 1/10/77 Revised: 4/10/92

MARYLAND HIGHER EDUCATION COMMIISSION
DATA DICTIONARY

ELEMENT TITLE:

Identification Number

DEFINITION: An encrypted version of the student's (or employee's) social security number using the MHEC encryption technique as provided by the institution. When actual SSN is not known, an encrypted version of an institution assigned 9-digit identification will be present.

FORMAT: alphanumeric - 9 characters

CODES: encrypted version is 7 alpha-numeric characters with 2 blanks at end of field

COMMENTS: If assigned number is used, it should always remain unique for student at assigning institution. The Identification Number Type must be set to "2" in this case.

EDS allows use of employee numbers that are not SSNs as long as the number remains constant for the employee every year.

Some follow-up studies may use a student number that is not SSN based (bachelor's survey at independents).

RELATED TO: Identification Number Type

GLOSSARY:

SYSTEMS: EIS,TSS,HGS,EDS,DIS,RTN

SYSNAME: IDN

DOCUMENTED: 1/10/77 Revised:

MARYLAND HIGHER EDUCATION COMMIISSION
DATA DICTIONARY

ELEMENT TITLE:

Identification Number Type

DEFINITION: An indicator that determines whether the identification number is based upon a valid social security number or an institution assigned substitute number in lieu of SSN.

FORMAT: numeric - 1 digit - blank valid

CODES: blank = valid social security number
2 = assigned identification number

COMMENTS: Present in EIS and DIS but with additional code of 1 and 3 which also mean the same as blank.

RELATED TO: Identification Number

GLOSSARY:

SYSTEMS: TSS,HGS,EIS,DIS

SYSNAME: IDT

DOCUMENTED: 1/10/77 Revised: 9/1/95

ELEMENT TITLE:

Gender

DEFINITION: The gender of student as recorded by the institution. Individuals missing this information must be assigned a gender.

FORMAT: numeric - 1 digit

CODES:
1 = Male
2 = Female
3 = Unknown, male assigned
4 = Unknown, female assigned

COMMENTS: Students missing gender should be assigned evenly between codes 3 and 4 by the institution.

RELATED TO:

GLOSSARY:

SYSTEMS: EIS,TSS,HGS,DIS,EDS,RTN,AGGR

SYSNAME: SEX

DOCUMENTED: 1/10/77 Revised:

ELEMENT TITLE:

Degree Sought

DEFINITION: The student's most recent status in pursuing a formal award indicating either the level of degree being sought or non-degree seeking. This is the 2009 standard.

FORMAT: numeric - 2 digit

CODES:
00 = unknown
01 = private career school diploma/certificate undergraduate
10 = lower division certificate
20 = associate
30 = upper division certificate
40 = bachelors
47 = non-degree undergraduate
50 = post-baccalaureate certificate
60 = masters
70 = certificate of advanced study
81 = doctorate research/scholarship
85 = doctorate professional practice
86 = doctorate other
87 = non-degree graduate
99 = multi-major (DIS only)

COMMENTS: This code used in degree sought varies between different MHEC reporting systems prior to 2009. Please review the system manual to determine correct coding or refer to DD30.1.

RELATED TO: Program Taxonomy code, together make up academic program code

GLOSSARY: FORMAL AWARD, NON-DEGREE SEEKING, DEGREE SEEKING, ASSOCIATE, BACHELORS, LOWER DIVISION CERTIFICATE, UPPER DIVISION CERTIFICATE, POST-BACCALAUREATE CERTIFICATE, CERTIFICATE OF ADVANCED STUDY, DOCTORATE RESEARCH/SCHOLARSHIP, DOCTORATE PROFESSIONAL PRACTICE, DOCTORATE OTHER, PRIVATE CAREER SCHOOL/DIPLOMA/CERTIFICATE

SYSTEMS: EIS, DIS, FAIS, HGS,TSS

SYSNAME: DEGREE

DOCUMENTED: 1/10/77 Revised: 1/30/09
-DD30-

ELEMENT TITLE:

Program Taxonomy

DEFINITION: The MHEC taxonomy for the most recent instructional program area of the student.

FORMAT: alphanumeric - 8 digits

CODES: published periodically in the Academic Programs at Maryland Colleges and Universities or contact MHEC for current listing

909901-- = undeclared, undecided or unknown

COMMENTS: Special reporting category exemptions to the academic program code inventory may be granted in writing by MHEC.

The taxonomy is based upon the HEGIS classification system with Maryland's unique alterations.

First two digits are called the major discipline (MAJORDS). The first four digits are called the discipline (DISCPLN).

The program taxonomy code is 8 characters. Older systems (such as EIS and DIS) use only the first 6 characters. This is possible since the last two (positions 7 and 8 of code) are currently always blank and are for future expansion.

RELATED TO: Degree Sought, together make up the academic program code

GLOSSARY:

SYSTEMS: EIS,TSS,HGS,DIS,RTN,PINV,IPINV,EDS,AGGR

SYSNAME: PROGRAM

DOCUMENTED: 5/7/80 Revised: 3/31/95

Program Taxonomy

Major Disciplines
Disciplines

SECTION I - Conventional Academic Subdivisions of Knowledge and Training

Code starts with

01 AGRICULTURE and NATURAL RESOURCES
- 0101 AGRICULTURE, GENERAL
- 0102 AGRONOMY
- 0103 SOILS SCIENCE
- 0104 ANIMAL SCIENCE
- 0105 DAIRY SCIENCE
- 0106 POULTRY SCIENCE
- 0107 FISH, GAME, AND WILDLIFE MANAGEMENT
- 0108 HORTICULTURE
- 0109 ORNAMENTAL HORTICULTURE
- 0110 AGRICULTURAL AND FARM MANAGEMENT
- 0111 AGRICULTURAL ECONOMICS
- 0112 AGRICULTURAL BUSINESS
- 0113 FOOD SCIENCE AND TECHNOLOGY
- 0114 FORESTRY
- 0115 NATURAL RESOURCES MANAGEMENT
- 0116 AGRICULTURE AND FORESTRY TECHNOLOGIES
- 0117 RANGE MANAGEMENT
- 0199 OTHER, AGRICULTURE AND NATURAL SCIENCES

02 ARCHITECTURE and ENVIRONMENTAL DESIGN
- 0201 ENVIRONMENTAL DESIGN, GENERAL
- 0202 ARCHITECTURE
- 0203 INTERIOR DESIGN
- 0204 LANDSCAPE ARCHITECTURE
- 0205 URBAN ARCHITECTURE
- 0206 CITY, COMMUNITY, AND REGIONAL PLANNING
- 0299 OTHER, ARCHITECTURE AND ENVIRONMENTAL DESIGN

03 AREA STUDIES
- 0301 ASIAN STUDIES, GENERAL
- 0302 EAST ASIAN STUDIES
- 0303 SOUTH ASIAN STUDIES
- 0304 SOUTHEAST ASIAN STUDIES
- 0305 AFRICAN STUDIES
- 0306 ISLAMIC STUDIES
- 0307 RUSSIAN AND SLAVIC STUDIES
- 0308 LATIN AMERICAN STUDIES
- 0309 MIDDLE EASTERN STUDIES
- 0310 EUROPEAN STUDIES, GENERAL
- 0311 EASTERN EUROPEAN STUDIES
- 0312 WEST EUROPEAN STUDIES
- 0313 AMERICAN STUDIES

0314 PACIFIC AREA STUDIES
0399 OTHER, AREA STUDIES

04 BIOLOGICAL SCIENCES
0401 BIOLOGY, GENERAL
0402 BOTANY, GENERAL
0403 BACTERIOLOGY
0404 PLANT PATHOLOGY
0405 PLANT PHARMACOLOGY
0406 PLANT PHYSIOLOGY
0407 ZOOLOGY, GENERAL
0408 PATHOLOGY, HUMAN AND ANIMAL
0409 PHARMACOLOGY, HUMAN AND ANIMAL
0410 PHYSIOLOGY, HUMAN AND ANIMAL
0411 MICROBIOLOGY
0412 ANATOMY
0413 HISTOLOGY
0414 BIOCHEMISTRY
0415 BIOPHYSICS
0416 MOLECULAR BIOLOGY
0417 CELL BIOLOGY
0418 MARINE BIOLOGY
0419 BIOMETRICS AND BIOSTATISTICS
0420 ECOLOGY
0421 ENTOMOLOGY
0422 GENETICS
0423 RADIOBIOLOGY
0424 NUTRITION, SCIENTIFIC
0425 NEUROSCIENCES
0426 TOXICOLOGY
0427 EMBRYOLOGY
0499 OTHER, BIOLOGICAL SCIENCES

05 BUSINESS and MANAGEMENT
0501 BUSINESS AND COMMERCE, GENERAL
0502 ACCOUNTING
0503 BUSINESS STATISTICS
0504 BANKING AND FINANCE
0505 INVESTMENTS AND SECURITIES
0506 BUSINESS MANAGEMENT AND ADMINISTRATION
0507 OPERATIONS RESEARCH
0508 HOTEL AND RESTAURANT MANAGEMENT
0509 MARKETING AND PURCHASING
0510 TRANSPORTATION AND PUBLIC UTILITIES
0511 REAL ESTATE
0512 INSURANCE
0513 INTERNATIONAL BUSINESS
0514 SECRETARIAL STUDIES
0515 PERSONNEL MANAGEMENT

0516 LABOR AND INDUSTRIAL RELATIONS
0517 BUSINESS ECONOMICS
0599 OTHER, BUSINESS AND MANAGEMENT

06 COMMUNICATIONS
0601 COMMUNICATIONS, GENERAL
0602 JOURNALISM
0603 RADIO.TELEVISION
0604 ADVERTISING
0605 COMMUNICATION MEDIA
0699 OTHER, COMMUNICATIONS

07 COMPUTER and INFORMATION SCIENCES
0701 COMPUTER AND INFORMATION SCIENCES, GENERAL
0702 INFORMATION SCIENCES AND SYSTEMS
0703 DATA PROCESSING
0704 COMPUTER PROGRAMMING
0705 SYSTEMS ANALYSIS
0799 OTHER, COMPUTER AND INFORMATION SYSTEMS

08 EDUCATION
0801 EDUCATION, GENERAL
0802 ELEMENTARY EDUCATION, GENERAL
0803 SECONDARY EDUCATION, GENERAL
0804 JUNIOR HIGH SCHOOL EDUCATION
0805 HIGHER EDUCATION, GENERAL
0806 JUNIOR AND COMMUNITY COLLEGE EDUCATION
0807 ADULT AND CONTINUING EDUCATION
0808 SPECIAL EDUCATION, GENERAL
0809 ADMINISTRATION OF SPECIAL EDUCATION
0810 EDUCATION OF THE MENTALLY RETARDED
0811 EDUCATION OF THE GIFTED
0812 EDUCATION OF THE DEAF
0813 EDUCATION OF THE CULTURALLY DISADVANTAGED
0814 EDUCATION OF THE VISUALLY HANDICAPPED
0815 SPEECH CORRECTION
0816 EDUCATION OF THE EMOTIONALLY DISTURBED
0817 REMEDIAL EDUCATION
0818 SPECIAL LEARNING DISABILITIES
0819 EDUCATION OF THE PHYSICALLY HANDICAPPED
0820 EDUCATION OF THE MULTIPLE HANDICAPPED
0821 SOCIAL FOUNDATIONS
0822 EDUCATIONAL PSYCHOLOGY
0823 PRE-ELEMENTARY EDUCATION
0824 EDUCATIONAL STATISTICS AND RESEARCH
0825 EDUCATIONAL TESTING, EVAL AND MEASUREMENT
0826 STUDENT PERSONNEL
0827 EDUCATIONAL ADMINISTRATION
0828 EDUCATIONAL SUPERVISION
0829 CURRICULUM AND INSTRUCTION

0830 READING EDUCATION
0831 ART EDUCATION
0832 MUSIC EDUCATION
0833 MATHEMATICS EDUCATION
0834 SCIENCE EDUCATION
0835 PHYSICAL EDUCATION
0836 DRIVER AND SAFETY EDUCATION
0837 HEALTH EDUCATION
0838 BUSINESS, COMMERCE, AND DISTRIBUTIVE EDUC
0839 INDUSTRIAL ARTS, VOCATIONAL, AND TECH EDUC
0899 OTHER, EDUCATION

09 ENGINEERING
0901 ENGINEERING, GENERAL
0902 AEROSPACE, AERONAUTICAL AND ASTRONAUT ENG
0903 AGRICULTURAL ENGINEERING
0904 ARCHITECTURAL ENGINEERING
0905 BIOENGINEERING AND BIOMEDICAL ENGINEERING
0906 CHEMICAL ENGINEERING
0907 PETROLEUM ENGINEERING
0908 CIVIL, CONSTRUCTION, AND TRANSPORTATION ENG
0909 ELECTRICAL, ELECTRONICS,AND COMMUNICATIONS
0910 MECHANICAL ENGINEERING
0911 GEOLOGICAL ENGINEERING
0912 GEOPHYSICAL ENGINEERING
0913 INDUSTRIAL AND MANAGEMENT ENGINEERING
0914 METALLURGICAL ENGINEERING
0915 MATERIALS ENGINEERING
0916 CERAMIC ENGINEERING
0917 TEXTILE ENGINEERING
0918 MINING AND MINERAL ENGINEERING
0919 ENGINEERING PHYSICS
0920 NUCLEAR ENGINEERING
0921 ENGINEERING MECHANICS
0922 ENVIRONMENTAL AND SANITARY ENGINEERING
0923 NAVAL ARCHITECTURE AND MARINE ENGINEERING
0924 OCEAN ENGINEERING
0925 ENGINEERING TECHNOLOGIES
0999 OTHER, ENGINEERING

10 FINE and APPLIED ARTS
1001 FINE ARTS, GENERAL
1002 ART
1003 ART HISTORY AND APPRECIATION
1004 MUSIC PERFORMING AND COMPOSITION
1005 MUSIC ARTS
1006 MUSIC HISTORY AND APPRECIATION
1007 DRAMATIC ARTS
1008 DANCE

1009 APPLIED DESIGN
1010 CINEMATOGRAPHY
1011 PHOTOGRAPHY
1099 OTHER, FINE AND APPLIED ARTS

11 FOREIGN LANGUAGES
1101 FOREIGN LANGUAGES, GENERAL
1102 FRENCH
1103 GERMAN
1104 ITALIAN
1105 SPANISH
1106 RUSSIAN
1107 CHINESE
1108 JAPANESE
1109 LATIN
1110 GREEK, CLASSICAL
1111 HEBREW
1112 ARABIC
1113 INDIAN (ASIATIC)
1114 SCANDINAVIAN LANGUAGES
1115 SLAVIC LANGUAGES
1116 AFRICAN LANGUAGES
1199 OTHER, FOREIGN LANGUAGES

12 HEALTH PROFESSIONS
1201 HEALTH PROFESSIONS, GENERAL
1202 HOSPITAL AND HEALTH CARE ADMINISTRATION
1203 NURSING
1204 DENTISTRY, DDS OR DMD DEGREE
1205 DENTAL SPECIALTIES
1206 MEDICINE, MD DEGREE
1207 MEDICAL SPECIALTIES
1208 OCCUPATIONAL THERAPY
1209 OPTOMETRY
1210 OSTEOPATHIC MEDICINE, DO DEGREE
1211 PHARMACY
1212 PHYSICAL THERAPY
1213 DENTAL HYGIENE
1214 PUBLIC HEALTH
1215 MEDICAL RECORD LIBRARIANSHIP
1216 PODIATRY OR PODIATRIC MEDICINE
1217 BIOMEDICAL COMMUNICATION
1218 VETERINARY MEDICINE
1219 VETERINARY MEDICINE SPECIALTIES
1220 SPEECH PATHOLOGY AND AUDIOLOGY-
1221 CHIROPRACTIC
1222 CLINICAL SOCIAL WORK
1223 MEDICAL LABORATORY TECHNOLOGIES
1224 DENTAL TECHNOLOGIES

1225 RADIOLOGIC TECHNOLOGIES
1299 OTHER, HEALTH PROFESSIONS

13 HOME ECONOMICS
1301 HOME ECONOMICS, GENERAL
1302 HOME DECORATION AND HOME EQUIPMENT
1303 CLOTHING AND TEXTILE
1304 CONSUMER ECONOMICS AND HOME MANAGEMENT
1305 FAMILY RELATIONS AND CHILD DEVELOPMENT
1306 FOODS AND NUTRITION
1307 INSTITUTIONAL MANAGEMENT AND CAFETERIA MGT
1399 OTHER, HOME ECONOMICS

14 LAW
1401 LAW, GENERAL
1499 OTHER, LAW

15 LETTERS
1501 ENGLISH, GENERAL
1502 LITERATURE, ENGLISH
1503 COMPARATIVE LITERATURE
1504 CLASSICS
1505 LINGUISTICS
1506 SPEECH, DEBATE, AND FORENSIC SCIENCE
1507 CREATIVE WRITING
1508 TEACHING ENGLISH AS FOREIGN LANGUAGE
1509 PHILOSOPHY
1510 RELIGIOUS STUDIES
1599 OTHER, LETTERS

16 LIBRARY SCIENCE
1601 LIBRARY SCIENCE, GENERAL
1699 OTHER, LIBRARY SCIENCE

17 MATHEMATICS
1701 MATHEMATICS, GENERAL
1702 STATISTICS, MATHEMATICAL AND THEORETICAL
1703 APPLIED MATHEMATICS
1799 OTHER, MATHEMATICS

18 MILITARY SCIENCES
1801 MILITARY SCIENCE
1802 NAVAL SCIENCE
1803 AEROSPACE SCIENCE
1899 OTHER, MILITARY SCIENCE

19 PHYSICAL SCIENCES
1901 PHYSICAL SCIENCES, GENERAL
1902 PHYSICS, GENERAL
1903 MOLECULAR PHYSICS
1904 NUCLEAR PHYSICS
1905 CHEMISTRY, GENERAL
1906 INORGANIC CHEMISTRY
1907 ORGANIC CHEMISTRY

1908 PHYSICAL CHEMISTRY
1909 ANALYTICAL CHEMISTRY
1910 PHARMACEUTICAL CHEMISTRY
1911 ASTRONOMY
1912 ASTROPHYSICS
1913 ATMOSPHERIC SCIENCES AND METEOROLOGY
1914 GEOLOGY
1915 GEOCHEMISTRY
1916 GEOPHYSICS AND SEISMOLOGY
1917 EARTH SCIENCES, GENERAL
1918 PALEONTOLOGY
1919 OCEANOGRAPHY
1920 METALLURGY
1999 OTHER, PHYSICAL SCIENCES

20 PSYCHOLOGY
2001 PSYCHOLOGY, GENERAL
2002 EXPERIMENTAL PSYCHOLOGY
2003 CLINICAL PSYCHOLOGY
2004 PSYCHOLOGY FOR COUNSELING
2005 SOCIAL PSYCHOLOGY
2006 PSYCHOMETRICS
2007 STATISTICS IN PSYCHOLOGY
2008 INDUSTRIAL PSYCHOLOGY
2009 DEVELOPMENTAL PSYCHOLOGY
2010 PHYSIOLOGICAL PSYCHOLOGY
2099 OTHER, PSYCHOLOGY

21 PUBLIC AFFAIRS and SERVICES
2101 COMMUNITY SERVICES, GENERAL
2012 PUBLIC ADMINISTRATION
2103 PARKS AND RECREATION MANAGEMENT
2104 SOCIAL WORK AND HELPING SERVICES
2105 LAW ENFORCEMENT AND CORRECTIONS
2106 INTERNATIONAL PUBLIC SERVICE
2199 OTHER, PUBLIC AFFAIRS AND SERVICES

22 SOCIAL SCIENCES
2201 SOCIAL SCIENCES, GENERAL
2202 ANTHROPOLOGY
2203 ARCHAEOLOGY
2204 ECONOMICS
2205 HISTORY
2206 GEOGRAPHY
2207 POLITICAL SCIENCE AND GOVERNMENT
2208 SOCIOLOGY
2209 CRIMINOLOGY
2210 INTERNATIONAL RELATIONS
2211 AFRO-AMERICAN STUDIES
2212 AMERICAN INDIAN CULTURAL STUDIES

2213 MEXICAN-AMERICAN CULTURAL STUDIES
2214 URBAN STUDIES
2215 DEMOGRAPHY
2299 OTHER, SOCIAL SCIENCES

23 THEOLOGY
2301 THEOLOGICAL PROFESSIONS, GENERAL
2302 RELIGIOUS MUSIC
2304 RELIGIOUS EDUCATION
2399 OTHER, THEOLOGY

49 INTERDISCIPLINARY STUDIES and COMMUNITY COLLEGE TRANSFER PROGRAMS
4901 GENERAL LIBERAL ARTS AND SCIENCES
4902 BIOLOGICAL AND PHYSICAL SCIENCES
4903 HUMANITIES AND SOCIAL SCIENCES
4904 ENGINEERING AND OTHER DISCIPLINES
4910 ARTS AND SCIENCES TRANSFER
4920 BIOLOGICAL SCIENCES TRANSFER
4930 HUMANITIES AND SOCIAL SCIENCE TRANSFER
4940 ENGINEERING TRANSFER
4950 GENERAL STUDIES TRANSFER
4960 TEACHER EDUCATION TRANSFER
4970 BUSINESS ADMINISTRATION TRANSFER
4980 COMPUTER SCIENCE TRANSFER
4999 OTHER, INTERDISCIPLINARY/TRANSFER STUDIES

SECTION II -Technological and Occupational Specialties Related to Curriculums Leading to Associate Degrees and Lower Division Certificates

Code starts with

50 BUSINESS and COMMERCE TECHNOLOGIES
- 5001 BUSINESS AND COMMERCE TECHNOLOGIES, GENERAL
- 5002 ACCOUNTING TECHNOLOGIES
- 5003 BANKING AND FINANCE TECHNOLOGIES
- 5004 MARKETING, DISTRIB, PURCH, BUSINESS TECH
- 5005 SECRETARIAL TECHNOLOGIES
- 5006 PERSONAL SERVICE TECHNOLOGIES
- 5007 PHOTOGRAPHY TECHNOLOGIES
- 5008 COMMUNICATIONS AND BROADCASTING TECHNOLOGIES
- 5009 PRINTING AND LITHOGRAPHY TECHNOLOGIES
- 5010 HOTEL AND RESTAURANT MANAGEMENT TECHNOLOGIES
- 5011 TRANSPORTATION AND PUBLIC UTIL TECHNOLOGIES
- 5012 APPLIED ARTS, GRAPHIC ARTS, FINE ARTS TECH
- 5099 OTHER, BUSINESS AND COMMERCE TECHNOLOGIES

51 DATA PROCESSING TECHNOLOGIES
- 5101 DATA PROCESSING TECHNOLOGIES, GENERAL
- 5102 KEY PUNCH OPERATOR AND OTHER INPUT PREP
- 5103 COMPUTER PROGRAMMER TECHNOLOGIES
- 5104 COMPUTER OPERATOR AND PERIPHERAL EQUIPMENT
- 5105 DATA PROCESSING EQUIPMENT MAINTENANCE
- 5199 OTHER, DATA PROCESSING TECHNOLOGIES

52 HEALTH SERVICES and PARAMEDICAL TECHNOLOGIES
- 5201 HEALTH SERVICES ASSISTANT
- 5202 DENTAL ASSISTANT TECHNOLOGIES
- 5203 DENTAL HYGIENE TECHNOLOGIES
- 5204 DENTAL LABORATORY TECHNOLOGIES
- 5205 MEDICAL OR BIOLOGICAL LABORATORY ASSISTANCE
- 5206 ANIMAL LABORATORY ASSISTANT TECHNOLOGIES
- 5207 RADIOLOGIC TECHNOLOGIES
- 5208 NURSING, RN
- 5209 NURSING, PRACTICAL
- 5210 OCCUPATIONAL THERAPY TECHNOLOGIES
- 5211 SURGICAL TECHNOLOGIES
- 5212 OPTICAL TECHNOLOGIES
- 5213 MEDICAL RECORD TECHNOLOGIES
- 5214 MEDICAL ASSISTANT AND MEDICAL OFFICE ASSIST
- 5215 INHALATION THERAPY TECHNOLOGIES
- 5216 PSYCHIATRIC TECHNOLOGIES
- 5217 ELECTRO DIAGNOSTIC TECHNOLOGIES
- 5218 INSTITUTIONAL MGT TECH, (REST HOME, ETC)
- 5219 PHYSICAL THERAPY TECHNOLOGIES
- 5299 OTHER, HEALTH SERVICES AND PARAMEDICAL TECH

53 MECHANICAL and ENGINEERING TECHNOLOGIES
- 5301 MECHANICAL AND ENGINEERING TECH, GENERAL
- 5302 AERONAUTICAL AND AVIATION TECHNOLOGIES
- 5303 ENGINEERING GRAPHICS
- 5304 ARCHITECTURAL DRAFTING TECHNOLOGIES
- 5305 CHEMICAL TECHNOLOGIES
- 5306 AUTOMOTIVE TECHNOLOGIES
- 5307 DIESEL TECHNOLOGIES
- 5308 WELDING TECHNOLOGIES
- 5309 CIVIL TECHNOLOGIES
- 5310 ELECTRONICS AND MACHINE TECHNOLOGIES
- 5311 ELECTROMECHANICAL TECHNOLOGIES
- 5312 INDUSTRIAL TECHNOLOGIES
- 5313 TEXTILE TECHNOLOGIES
- 5314 INSTRUMENTATION TECHNOLOGIES
- 5315 MECHANICAL TECHNOLOGIES
- 5316 NUCLEAR TECHNOLOGIES
- 5317 CONSTRUCTION AND BUILDING TECHNOLOGIES
- 5399 OTHER, MECHANICAL AND ENGINEERING TECH

54 NATURAL SCIENCE TECHNOLOGIES
- 5401 NATURAL SCIENCE TECHNOLOGIES, GENERAL
- 5402 AGRICULTURE TECHNOLOGIES
- 5403 FORESTRY AND WILDLIFE TECHNOLOGIES
- 5404 FOOD SERVICES TECHNOLOGIES
- 5405 HOME ECONOMICS TECHNOLOGIES
- 5406 MARINE AND OCEANOGRAPHIC TECHNOLOGIES
- 5407 LABORATORY TECHNOLOGIES, GENERAL
- 5408 SANITATION AND PUB HEALTH INSPECTION TECH
- 5499 OTHER, NATURAL SCIENCE TECHNOLOGIES

55 PUBLIC SERVICE RELATED TECHNOLOGIES
- 5501 PUBLIC SERVICE TECHNOLOGIES, GENERAL
- 5502 BIBLE STUDY OR RELIGION-RELATED OCCUPATIONS
- 5503 EDUCATION TECHNOLOGIES
- 5504 LIBRARY ASSISTANT TECHNOLOGIES
- 5505 POLICE, LAW ENFORCEMENT, CORRECTIONS TECH
- 5506 RECREATION AND SOCIAL WORK RELATED TECH
- 5507 FIRE CONTROL TECHNOLOGY
- 5508 PUBLIC ADMINISTRATION AND MANAGEMENT TECH
- 5599 OTHER, PUBLIC SERVICE RELATED TECHNOLOGIES

56 DIRECTED TECHNOLOGY
- 5601 DIRECTED TECHNOLOGY

SECTION III - Miscellaneous

Code starts with

90 UNDECLARED, UNDECIDED, OR UNKNOWN
- 9099 UNDECIDED, UNDECLARED, UNKNOWN

ELEMENT TITLE:

Fall Attendance

DEFINITION: The classification level of student's fall attendance by the institution as full-time or part-time based on total semester hour load.

FORMAT: numeric - 1 digit

CODES: blank = not enrolled
1 = full-time, FT
2 = part-time, PT

COMMENTS: In HGS, a blank entry for fall and spring attendance indicates student not enrolled in either and implies enrolled only in summer session.

RELATED TO:

GLOSSARY: SEMESTER HOUR, FULL-TIME, PART-TIME

SYSTEMS: EIS,HGS,AGGR,RTN

SYSNAME: FATTEND

DOCUMENTED: 1/10/77 Revised: 4/10/92

ELEMENT TITLE:

Spring Attendance

DEFINITION: The classification level of student's spring attendance by the institution as full-time or part-time based on total semester hour load.

FORMAT: numeric - 1 digit

CODES: blank = not enrolled
1 = full-time, FT
2 = part-time, PT

COMMENTS: In HGS, a blank entry for fall and spring attendance indicates student not enrolled in either and implies enrolled only in summer session.

RELATED TO:

GLOSSARY: SEMESTER HOUR, FULL-TIME, PART-TIME

SYSTEMS: HGS

SYSNAME: SATTEND

DOCUMENTED: 6/3/91 Revised: 4/10/92

ELEMENT TITLE:

Admission Exemption Flag

DEFINITION: This flag defines all first-time undergraduate students admitted as exemptions to the regular admission standards in the collection period.

FORMAT: numeric - 1 digit - blank valid

CODES: blank = not admission exempted student or N/A
1 = admission exempted student

COMMENTS: Only required for first-time undergraduate students. Required only from 4 year public institutions (except UMAB, UB, UMUC).

RELATED TO: First-Time Flag, Fall Student Level

GLOSSARY: FIRST-TIME UNDERGRADUATE

SYSTEMS: EIS-EX,HGS,RTN

SYSNAME: EXEMPT

DOCUMENTED: 12/5/85 Revised:

ELEMENT TITLE:

High School Code (College Board)

DEFINITION: The identity of the high school from which the student graduated.

FORMAT: numeric - 6 digits - blank valid

CODES: Codes are based on College Board School Codes
blank = unknown
210000-219000 = Maryland high school (see report from HS system)
219100 = unknown Maryland high school
219120 = unknown public Maryland high school
219150 = unknown private Maryland high school
219200 = Maryland G.E.D.
219250 = Maryland External Degree Program
219300 = out-of-state high school
out-of-state high school codes can be provided by the institution but must conform to College Board coding
219400 = out-of-state G.E.D.
219501 = Home-schooled
The code list report is available by running the high school report program which uses the high school inventory file.

COMMENTS: Any codes provided for out-of-state high schools (start with a number other than 21) will be analyzed by MHEC as equal to code 219300.
Use 219100 only if public or private is not known.

Maryland high schools that have been discontinued (closed) for which no code exists in file should be coded as unknown Maryland high school (219100).

RELATED TO: High School Name, High School Graduation Year

GLOSSARY:

SYSTEMS: HGS,HS

SYSNAME: CBSC

DOCUMENTED: 6/3/91 Revised: 2/2/93; 6/5/2000

ELEMENT TITLE:

Cumulative Native Credit Hours Earned

DEFINITION: The current number of credit hours completed in credit courses at the reporting institution (excluding transfer credits) as of the collection period at a grade level satisfactory for degree requirements.

FORMAT: numeric - 4 digits - implied decimal 999V9

CODES: minimum value zero

COMMENTS: These are only those credit hours earned at reporting institution. Transfer credit hours, regardless of their status, should not be included. Remedial courses should not be included.

RELATED TO: Fall Credit Hours Attempted, Fall Student Level, First-Time Flag

GLOSSARY: CREDIT HOURS, CREDIT COURSE

SYSTEMS: TSS,HGS

SYSNAME: CNCRHRE

DOCUMENTED: 6/3/91 Revised: 4/10/92

ELEMENT TITLE:

Math Remedial Assessment

DEFINITION: An indicator of whether (1) the student has been assessed in math for remediation and the result of that assessment or (2) took remedial math work and assessment information was not available.

FORMAT: numeric - 1 digit - blank valid

CODES: blank = not assessed
1 = assessed and remediation not needed
2 = assessed to need remedial math work
3 = unavailable assessment status but took remedial math work

COMMENTS: Only required for first-time undergraduate students.

Institutions should use the coding combination of blank, 1, 2 when assessment status information is known and kept at the institution level (usually at community colleges). In the case when this is not done (usually at 4-year), the coding combination of blank,3 should be used. This later combination should only be used when the institution cannot provide information on whether the student was assessed (use codes, 1,2) but was known to have taken remedial math work. Institutions should make an effort to improve their systems to provide assessment status and use code 1 or 2.

RELATED TO:

GLOSSARY: REMEDIAL

SYSTEMS: HGS

SYSNAME: MATHRA

DOCUMENTED: 6/3/91 Revised: 4/10/92

ELEMENT TITLE:

English Remedial Assessment

DEFINITION: An indication of whether (1) the student has been assessed in English for remediation and the result of that assessment or (2) took remedial English work and assessment information was not available.

FORMAT: numeric - 1 digit - blank valid

CODES: blank = not assessed
1 = assessed and remediation not needed
2 = assessed to need remedial English work
3 = unavailable assessment status but took remedial English work

COMMENTS: Only required for first-time undergraduate students.

Institutions should use the coding combination of blank, 1, 2 when assessment status information is known and kept at the institution level (usually at community colleges). In the case when this is not done (usually at 4-year), the coding combination of blank,3 should be used. This later combination should only be used when the institution cannot provide information on whether the student was assessed (use codes 1,2) but was known to have taken remedial English work. Institutions should make an effort to improve their systems to provide assessment status and use code 1 or 2.

RELATED TO:

GLOSSARY: REMEDIAL

SYSTEMS: HGS

SYSNAME: ENGLRA

DOCUMENTED: 6/3/91 Revised: 4/10/92

ELEMENT TITLE:

Reading Remedial Assessment

DEFINITION: An indication of whether (1) the student has been assessed in reading for remediation and the result of that assessment or (2) took remedial reading work and assessment information was not available.

FORMAT: numeric - 1 digit - blank valid

CODES: blank = not assessed
1 = assessed and remediation not needed
2 = assessed to need remedial reading work
3 = unavailable assessment status but took remedial reading work

COMMENTS: Only required for first-time undergraduate students.

Institutions should use the coding combination of blank, 1, 2 when assessment status information is known and kept at the institution level (usually at community colleges). In the case when this is not done (usually at 4-year), the coding combination of blank,3 should be used. This later combination should only be used when the institution cannot provide information on whether the student was assessed (use codes 1,2) but was known to have taken remedial reading work. Institutions should make an effort to improve their systems to provide assessment status and use code 1 or 2.

GLOSSARY: REMEDIAL

SYSTEMS: HGS

SYSNAME: READRA

DOCUMENTED: 6/3/91 Revised: 4/10/92

ELEMENT TITLE:

First Math Grade

DEFINITION: The final grade in the first math credit course taken for which a student can earn credit towards a formal award. Generally the content would include college algebra. If a student takes more than one math credit course simultaneously, the grade for the lowest level credit course should be provided.

FORMAT: alphanumeric - 1 character - blank valid

CODES:
blank = not available, not taken
A = letter grade of A
B = letter grade of B
C = letter grade of C
D = letter grade of D
P = letter grade of P (for use as pass in pass/fail)
F = letter grade of F

COMMENTS: Only required for first-time undergraduate students. Each institution will identify this course for the Commission. "I" (Incomplete) and "W" (Withdrew) are not final grades.

For community colleges, this course must be transferable.

RELATED TO: First Math Course ID

GLOSSARY: CREDIT COURSE

SYSTEMS: HGS

SYSNAME: FSTMATHG

DOCUMENTED: 3/5/91 Revised: 4/10/92

ELEMENT TITLE:

First Math Course ID

DEFINITION: The institution's course ID for the first Math grade reported. This ID must be for a credit course.

FORMAT: alphanumeric - 9 characters - blank valid

CODES: blank = not available, not taken
institution's course ID (e.g. MATH100)
left-justified

COMMENTS:

RELATED TO: First Math Grade

GLOSSARY: CREDIT COURSE

SYSTEMS: HGS

SYSNAME: FSTMATHC

DOCUMENTED: 6/3/91 Revised: 6/3/91

ELEMENT TITLE:

First English Grade

DEFINITION: The final grade in the first English credit course taken for which a student can earn credit toward a formal award. Generally this would be an English composition course. If a student takes more than one English credit course simultaneously, the grade for the lowest level credit course should be provided.

FORMAT: alphanumeric - 1 character - blank valid

CODES:
blank = not available, not taken
A = letter grade of A
B = letter grade of B
C = letter grade of C
D = letter grade of D
P = letter grade of P (for use as pass in pass/fail)
F = letter grade of F

COMMENTS: Only required for first-time undergraduate students. Each institution will identify this course for the Commission. "I" (Incomplete) and "W" (Withdrew) are not final grades.

For community colleges, this course must be transferable.

RELATED TO: First English Course ID

GLOSSARY: CREDIT COURSE

SYSTEMS: HGS

SYSNAME: FSTENGLG

DOCUMENTED: 3/5/91 Revised: 4/10/92

ELEMENT TITLE:

First English Course ID

DEFINITION: The institution's course ID for the first English grade reported. This ID must be for a credit course.

FORMAT: alphanumeric - 9 characters - blank valid

CODES: blank = not available, not taken
institution's course number (e.g. ENG101)
left-justified

COMMENTS:

RELATED TO: First English Grade

GLOSSARY: CREDIT COURSE

SYSTEMS: HGS

SYSNAME: FSTENGLC

DOCUMENTED: 6/3/91 Revised:

ELEMENT TITLE:

Cumulative Grade Point Average

DEFINITION: The student's grade point average (as defined by the institution) as of the end of the collection period.

FORMAT: numeric - 3 digits - implied decimal 9V99, blank valid

CODES: blank = not applicable

COMMENTS: Based upon a four-point system. Cumulative Grade Point Average is blank when the student has none available (e.g. taken only remedial courses, taken only pass/fail courses, had all incompletes, exclusively auditors or withdrawn from all courses). If the field is zero-filled, this is interpreted to mean the student has a zero cumulative GPA (i.e. failed all courses attempted).

RELATED TO: Cumulative Native Credit Hours Earned

GLOSSARY:

SYSTEMS: TSS,HGS

SYSNAME: CUMGPA

DOCUMENTED: 3/5/91 Revised: 5/01/93

ELEMENT TITLE:

SAT Math Score

DEFINITION: The SAT math score as reported to the institution by the College Board. If more than one score has been reported, the institution should include the score used for admission purposes. The SAT scoring changed with the 1996 collection submissions.

FORMAT: numeric - 3 digits - blank valid

CODES: blank = not available
001-800 = SAT math score

COMMENTS: Only required for recent high school graduates (graduated high school previous year and first-time undergraduate students). Optional for 2 year public institutions. Either SAT or ACT required for first-time undergraduate students at four-year public institutions (first-time flag set to 1). Starting in 1996, the SAT scores reported will reflect the new recentered test scoring.

RELATED TO: ACT Scores, First-Time Flag

GLOSSARY: FIRST-TIME UNDERGRADUATE STUDENTS

SYSTEMS: HGS

SYSNAME: SATMATH

DOCUMENTED: 3/5/91 Revised: 5/20/91

ELEMENT TITLE:

SAT Verbal Score

DEFINITION: The SAT verbal score as reported to the institution by the College Board. If more than one score has been reported, the institution should include the score used for admission purposes. The SAT scoring changed with the 1996 collection submissions.

FORMAT: numeric - 3 digits - blank valid

CODES: blank = not available
001 - 800 = SAT verbal score

COMMENTS: Only required for recent high school graduates (graduated high school previous year and first-time undergraduate students). Optional for 2 year public institutions. Either SAT or ACT required for first-time undergraduate students at four-year public institutions (first-time flag set to 1).). Starting in 1996, the SAT scores reported will reflect the new recentered test scoring.

RELATED TO: ACT Scores, First-Time Flag

GLOSSARY: FIRST-TIME UNDERGRADUATE STUDENTS

SYSTEMS: HGS

SYSNAME: SATVERB

DOCUMENTED: 3/5/91 Revised: 5/20/91

ELEMENT TITLE:

ACT English Score

DEFINITION: The ACT (American College Testing) English score as reported to the institution by American College Testing. If more than one score has been reported, the institution should include the score used for admissions purposes.

FORMAT: numeric - 2 digits - blank valid

CODES: blank = not available
00-36 = test score

COMMENTS: Only required for recent high school graduates (graduated high school previous year and first-time undergraduate students). Optional for 2 year public institutions. Either SAT or ACT required for first-time undergraduate students at four-year public institutions (first-time flag set to 1).

RELATED TO: SAT Scores, First-Time Flag

GLOSSARY: FIRST-TIME UNDERGRADUATE STUDENTS

SYSTEMS: HGS

SYSNAME: ACTENGL

DOCUMENTED: 3/5/91 Revised: 4/10/92

ELEMENT TITLE:

ACT Math Score

DEFINITION: The ACT (American College Testing) math score as reported to the institution by American College Testing. If more than one score has been reported, the institution should include the score used for admissions purposes.

FORMAT: numeric - 2 digits - blank valid

CODES: blank = not available
00-36 = test score

COMMENTS: Only required for recent high school graduates (graduated high school previous year and first-time undergraduate students). Optional for 2 year public institutions. Either SAT or ACT required for first-time undergraduate students at four-year public institutions (first-time flag set to 1).

RELATED TO: SAT Scores, First-Time Flag

GLOSSARY: FIRST-TIME UNDERGRADUATE STUDENTS

SYSTEMS: HGS

SYSNAME: ACTMATH

DOCUMENTED: 3/5/91 Revised: 4/10/92

ELEMENT TITLE:

ACT Reading Score

DEFINITION: The ACT (American College Testing) reading score as reported to the institution by American College Testing. If more than one score has been reported, the institution should include the score used for admissions purposes.

FORMAT: numeric - 2 digits - blank valid

CODES: blank = not available
00-36 = test score

COMMENTS: Only required for recent high school graduates (graduated high school previous year and first-time undergraduate students). Optional for 2 year public institutions. Either SAT or ACT required for first-time undergraduate students at four-year public institutions (first-time flag set to 1).

RELATED TO: SAT Scores, First-Time Flag

GLOSSARY: FIRST-TIME UNDERGRADUATE STUDENTS

SYSTEMS: HGS

SYSNAME: ACTREAD

DOCUMENTED: 3/5/91 Revised: 4/10/92

ELEMENT TITLE:

ACT Science Reading Score

DEFINITION: The ACT (American College Testing) science reading score as reported to the institution by American College Testing. If more than one score has been reported, the institution should include the score used for admissions purposes.

FORMAT: numeric - 2 digits - blank valid

CODES: blank = not available
00-36 = test score

COMMENTS: Only required for recent high school graduates (graduated high school previous year and first-time undergraduate students). Optional for 2 year public institutions. Either SAT or ACT required for first-time undergraduate students at four-year public institutions (first-time flag set to 1).

RELATED TO: SAT Scores, First-Time Flag

GLOSSARY: FIRST-TIME UNDERGRADUATE STUDENTS

SYSTEMS: HGS

SYSNAME: ACTSCIR

DOCUMENTED: 3/5/91 Revised: 4/10/92

ELEMENT TITLE:

ACT Composite Score

DEFINITION: The ACT (American College Testing) composite score as reported to the institution by American College Testing. If more than one score has been reported, the institution should include the score used for admissions purposes.

FORMAT: numeric - 2 digits - blank valid

CODES: blank = not available
00-36 = test score

COMMENTS: Only required for recent high school graduates (graduated high school previous year and first-time undergraduate students). Optional for 2 year public institutions. Either SAT or ACT required for first-time undergraduate students at four-year public institutions (first-time flag set to 1 or 2).

RELATED TO: SAT Scores, First-Time Flag

GLOSSARY: FIRST-TIME UNDERGRADUATE STUDENTS

SYSTEMS: HGS

SYSNAME: ACTCOMP

DOCUMENTED: 3/5/91 Revised: 4/10/92

Appendix B

Glossary

For definitions of terms please refer to the Maryland Annual Data Collection Glossary available online at http://data.mhec.state.md.us/macinfo/glossary.pdf

Appendix C
Tape Submission Form

MARYLAND HIGHER EDUCATION COMMISSION

INSTITUTIONAL CERTIFICATION AND SPECIFICATION FORM FOR AUTOMATED SUBMISSION

INSTRUCTIONS - The institution should complete this form and forward to either the Commission or your segmental coordinator. It is important that all information be completed and this form accompany the tape to insure accurate transfer of data.

SUBMISSION DATE ____/____/____ FOR INSTITUTION _____

CERTIFICATION

Attached is the tape submission for the system indicated below in the standard MHEC record format and prepared in accordance with MHEC instructions and data definitions.

Name _____

Title _____

Phone _____

I certify that the information submitted on this tape is correct and true to the best of my knowledge.

Signature _____

System Submitted (check only one and supply all information)

	Freeze Date[1]	Number of Records on Tape
___ Enrollment Information System	__/__/__	_____ students
___ Degree Information System	N/A	_____ students
___ Employee Data System	__/__/__	_____ employees
___ High School Graduate System	N/A	_____ students
___ Transfer Student System	N/A	_____ students

TAPE SPECIFICATIONS

Name and model of computer used: _____

Circle appropriate specifications:

	Preferred	Other options		
Label on tape:	**unlabeled**	ANSI		IBM
Character Format:	**ASCII**	EBCDIC		
Tape Format:	**9-Track**			
Density:	**6250 BPI**	1600		
Record Size (characters):	100	Other, specify _____		
Block Size (physical length in characters):	100	1000	4000	Other, specify _____

[1] Freeze Date is the "as of" for the data on tape

INSTRUCTIONS

In order to allow institutions flexibility to submit tapes in different formats, the use of this form allows for an accurate and complete transfer of information on tape to the Commission. The use of this form eliminates missing or incorrect specifications that cause both confusion and extra work. It also reduces the possibility of loss of data or misinterpretation.

A cover letter in lieu of this certification form can be used as an alternative. Please be sure to include all of the information contained on this form.

SPECIAL PUBLIC SEGMENT COORDINATOR INSTRUCTIONS

Even though most system manuals indicate a one file (institution) per tape relationship, this is not the easiest or the most practical way for a segment to do the normal transfer of many institutions at one time. In order to smoothly transfer tapes, a complete description of the tape is to include: type of label (unlabeled, ANSI, or IBM), character format (ASCII or EBCDIC), record size in characters and either block size in characters (physical record length) or blocking factor. Using this form as a model, a certification of the submission is required. This certification must be by the individual institution for community colleges, Morgan and St. Mary's. The UM can submit certifications by either the institutions or the segment. The freeze date for enrollment and employee submissions (day when snapshot of students or employees was taken to create the tape file) must be included for each institution.

In addition to this information, the tape format itself must be restricted. Each institution (or organizational) reporting unit must be in a separate physical file even if on one tape. In the past, we have had problems in trying to separate the institution from one large file due to bad FICE coding or tape specifications. When multiple institutions are placed in separate files on one tape, each file must be identified and a control count of total records in each file must be supplied. This control count is necessary to validate our reading of the tape. The separate files insure that records are loaded by us for the proper institution.