MICHIGAN STATE
UNIVERSITY

Visions of Automation:
From Paper-based to
Online Degree Certification

Doug McKenna, Associate Registrar for Certification
mckenn62@msu.edu

Kristin Schuette, Associate Registrar for Technology
schuett1@msu.edu

Michigan State University

- Nation's pioneer Land Grant institution
- Located in East Lansing, MI
- 45,500 students (35,800 undergrads)
- 16 Colleges, 3 Medical Schools, College of Law
- 6,000 students apply for graduation each Spring
- 2,000 students apply for graduation each Summer and Fall

Paper-based Degree Certification at MSU

- In place for 15 years

- "Deficiency List" – advisers detail student deficiencies

- 2 copies are printed, one on expensive sticker-stock, one on paper

"Deficiency List" Process

- Student applies for graduation on the Web
- Registrar's Office (RO) generates Deficiency Lists at the 4th week of the semester (2nd week in Summer)
- Sticker-stock copy mailed to colleges
- Advisers write student requirement deficiencies on each sticker, keeping a copy for their records
- RO Degree Staff manually move the stickers to the paper copy kept in the RO.

"Deficiency List" Process (Continued)

- Internal transcript printed for each applied student at the end of the term

- Two Associate Registrars and two Assistant Registrars manually check each student's transcript against the student's sticker

- Degree Staff manually enter confer or deny decisions into SIS student-by-student

"Deficiency List" Process: Pros and Cons

THE GOOD

- Requires input from the college / department
- Established process – end users are comfortable with it
- Fairly efficient given the scale of the operation

THE BAD

- Expensive, Labor-intensive, Dated
- Exposure for human error
- "Reactive" certification model - advisers have to wait for information from the RO in order to take action
- Rushed - advisers have to get the information back to the RO under a strict deadline

From Reactive to Proactive Certification: Degree Audit

- Student still applies for graduation on the web
- Advisers generate reports online for review *and decision* entry as soon as student applies
  - Up to two semesters in advance
  - No waiting for information from the RO
- Earlier interaction with potential graduates
- RO uses program to 'macro-load' decisions to SIS

What is Degree Audit?

- An online degree certification tool

- Brings together:
  - Student Information System (SIS)
  - Degree Navigator (DN)
  - College user input

    …via the Electronic Student Academic Folder (ESAF)

- Activate major-by-major, at the college's discretion

  - "Test Mode" option available

- Is NOT "automatic"

  - Students must still apply for graduation
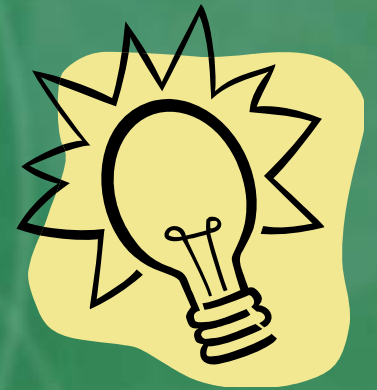 - Advisers still in control of the decision for each student

More Info on ESAF

For additional information on the Electronic Student Academic Folder (ESAF) in use at Michigan State University, visit the "Conference Presentations" section of the "About Us" page on the MSU RO website:

http://www.reg.msu.edu/aboutus.asp

Degree Navigator's Role

- DN evaluates student record – indicates if ALL university, college, and program requirements are complete

- Requirement accuracy: Advisers work with RO to ensure DN requirements coding is correct

- Substitutions/Exceptions: entered by advisers as needed

- DN Batch Database: data warehouse of student degree reports – the audit "answers"

The Degree Audit System

Advisers log into ESAF and select Degree Audit:

Generating a Report

Help

Timestamp

Term,
College/Dept,
Major

Student Academic Folder - Degree Audit | Main Menu

Wednesday, 3/12/2008

Degree Audit Help

Prior Term APPL Report

Degree Audit RO Administration

SIS and DN Data as of Thursday, May 03, 2007 2:36:47 PM

You must select an **Award Term** and a **College - Department** value. By leaving all other selection boxes alone, you will retrieve all students for a given Award Term for the College-Department selected.

To limit the student population generated, select/enter values in the selection boxes below.
To select consecutive values in a list, hold the 'shift' key down while clicking with your mouse.
To select non-consecutive values in a list, hold the 'ctrl' key down while clicking with your mouse.
To un-select a value, hold the 'ctrl' key down while clicking the selected value with your mouse.
To view the list of students, click the submit button at the bottom of the page.

Information generated by this system comes from **SISINFO** and **Degree Navigator**.
Degree data is updated each night as needed, based on changes to the student academic and degree records.

Award Term	**College - Department**
US08 ▾	Communication Arts and Sciences- All Depts (college level access) ▾
	If a college-department is missing **and** it is a valid college-department **per SIS**, please let us know

Student Level - Class	**Major (Code-Desc-Lvl-Award Type)**
UN-1 ▲ UN-2 UN-3 UN-4 ▼	1353-Advertising-UN-BA 1354-Advertising-UN-ADDU 1355-Advertising-UN-BA 1378-Communication-UN-BA 1379-Communication-UN-ADDU 1380-Communication-UN-BA 1405-Journalism-UN-BA 1406-Journalism-UN-ADDU 1407-Journalism-UN-BA 1435-Public Relations-UN-SPCU

If a major is missing **and** it is a valid major participating in Degree Audit, please contact the Registrar's Office Degree Staff.

☐ **Honors College Students Only**
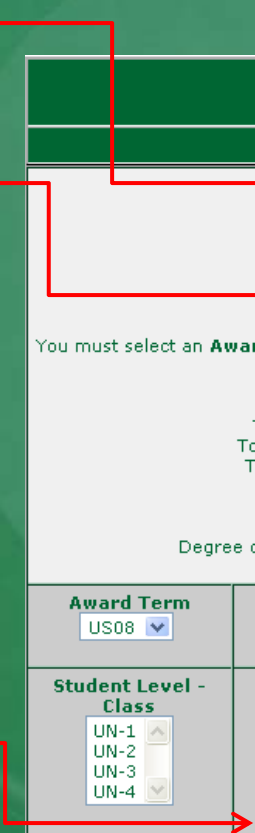
Three is a Magic Number

- Per SIS: Student has applied for graduation

  Degree Status (SIS) = APPL

- Per DN: Student requirements are complete

  Requirement Status (DN) = Done

- Per DA: No decision has been entered yet

  Decision Status (DA) = No Decision

Generating a Report (cont'd)

Requirement Status (DN)

Decision Status (DA)

Degree Status (SIS)

Output & Sort Selection

Enable Degree Decision Entry

Of course the adviser can select many different combinations to get different reports…

S Entering Decisions

Report header (not shown) has "quick guide" for decisions.

Decisions entered in the radio buttons at the far left of the report.

CONF	CONF OVER	DENY	UNDO	NONE	Comments	PID	Student Name	DA Major Code	Degree Name	Award Type	Award Status	Deg Aud Stat
⦿	-	○	-	○		A	G C	1450	Communicative Sciences and Disorders, BA	BA	APPL	
○	-	⦿	-	○	Comments required for DENY decisions.	A	C	1450	Communicative Sciences and Disorders, BA	BA	APPL	
○	-	○	-	⦿	Comments are available with NONE decisions.	A	V L E	1450	Communicative Sciences and Disorders, BA	BA	APPL	

Submit Decisions

DA Major Code	Degree Name	Award Type	Award Status	Degree Audit Status	Degree Audit Status Details	Degree Audit Comment Only	Requirements Complete	In Progress	Honors College
1450	Communicative Sciences and Disorders, BA	BA	APPL				Yes	Yes	
1450	Communicative Sciences and Disorders, BA	BA	APPL				Yes	Yes	
1450	Communicative Sciences and Disorders, BA	BA	APPL				Yes	Yes	

Decision Routing

DA System capable of "one-way" decision routing:

| Department Adviser | College Adviser | Director of Advising (College) |

Typical route:

- Department generates report for students with no decision
- College generates report for students with Department decision
- Director generates report for students with College decision and applies "final" approval

* Director can submit decision at any time w/o prior decisions in system *

Decision Processing

Once Director enters final decision, RO process takes over:

- Decision to Deny – loaded to SIS immediately, email to student
- Decision to Confer
  - Wait until term is over
  - Student still in applied status
  - Check that DN still "done"
  - No "in-progress" courses
  - Miscellaneous last minute checks (120 credits, etc.)
    - If all OK, conferral loaded to SIS, email to student
    - If not OK, problem - needs review
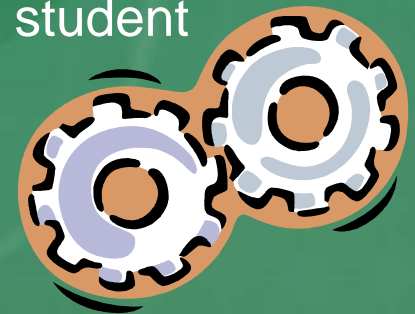
Reviewing Student by Student

Reviewing Individual students is done on the Degree Audit Status Log page in the ESAF.

All activity captured in the log.

| Name	B , I
PID	A
Level Class	UN 4
Major	1450-Communicative Sci & Disorders

View Current Degree Reports for Student

SIS and DN Data as of Tuesday, March 11, 2008 8:32:10 AM

1450 Communicative Sciences and Disorders, BA
SIS Award Status: APPL
Intended Award Term: SS08

Honors College (SIS): -

CUM GPA (SIS): 2.8715
Pending Transfer Credits: 0

Requirements Complete (DN): Yes
In Progress (DN): Yes

Status Applied Date	DA Status	Award Term	Status Applied By	Comments	View "Frozen" Degree Report?
12/14/2007 11:00:01 AM	COMM_EMAIL_PEND	SS08	RO Degree Audit Daily, RO	Confidential Message: DN=Done,PEND	-
29/2008 11:21:01 AM	CONF_Coll_DA	SS08	Gretchen Paige, Communication Arts and Sciences		-
1/31/2008 9:23:55 AM	CONF_DA	SS08	Ann Hoffman, Communication Arts and Sciences		V

Comments required for all CONFOVER and DENY decisions.

CONF	CONFOVER	DENY	UNDO	NONE	Comments
-	-	-	○	⊙	
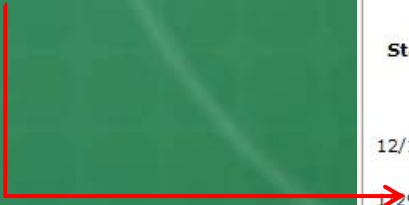
Problem Resolution

- After term, student still applied status in SIS

- RO immediately deny students with less than a 2.0 GPA or fewer than 120 credits

- Advisers generate reports to review students who were not conferred and take one of three actions:

  - Wait for a grade to be submitted

  - Enter a deny decision

  - Enter an "Override" decision

    - Ignore whether DN indicates done or not

    - Ignore in-progress courses – not needed for degree

Benefits and Statistics

BENEFITS

System easy to use

Information obtained earlier

Decisions recorded at any time – less hurry up and wait

Better tracking: system activity logged

Reduced cost – fewer expensive sticker-stock and paper reports req'd

Earlier intervention with "problem" students

Consistent application of University rules

Better reporting capabilities

Less manual work from RO staff

Less exposure for human error

STATISTICS

Degree Audit went live in Summer '07 and conferred 273 programs in the College of Communication Arts and Sciences

Spring 2008:

93 major codes using DA

2051 primary student degrees (45% of UN degrees)

2445 total student programs (degrees, 2nd degrees, additional majors, minors, etc.)

61% of UN degrees are either live or in "test" mode

How Did We Get Here?

- Teamwork – Collaborative effort between the RO, RO IS, AIS, and the Colleges
- Iterative reviews of Degree Navigator requirements
- Engaged a committed College to pilot the program

- Piggybacked on the success of ESAF
- Technical development to meet the requirements of the new process (DN Batch db, DA interface, macro, new reports, etc.)
- Lots of End-user Training

Questions and Answers

What questions do you have at this time?

Doug McKenna
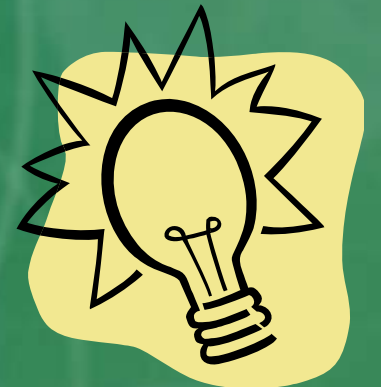Associate Registrar for Certification
mckenn62@msu.edu

Kristin Schuette
Associate Registrar for Technology
schuett1@msu.edu

URL for This Presentation

This presentation is available online at the Michigan State University Registrar's website:

http://www.reg.msu.edu/aboutus.asp