Applies to
SAP Student Lifecycle Management – Academic Structure

Summary
The purpose of this document is to describe lessons learned and best practices in regards to the academic structure of an implementation project for the SAP Student Lifecycle Management (SLCM) solution. For a detailed description of the product and its architecture please refer to the Base IMG Configuration Guide for SLCM, the SLCM Product Overview and other detailed implementation guidelines in the SCN Higher Education & Research Knowledge Center. Additional solution details can be found in the Student Lifecycle Management documentation BS7 (EHP 4) and the IHE102 SAP Student Lifecycle Management course.

The document shall be considered work in progress and does not claim completeness on the subject matter.

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1. Introduction to the Academic Structure

The academic structure is the basis for all study related processes in SAP Student Lifecycle Management. This cookbook describes dependencies between academic structure settings that impact a student’s academic lifecycle from registration to graduation. The goal is to make curriculum planers aware of the long term implications academic offerings have on academic processes, e.g.:

*Audits* (based on degrees or stages) which
- Help to manage the student’s academic performance and progression based on rules that are stored in academic structure objects.
- can be set up by either using *individual requirement profiles* or *requirement profile templates*.

*Audits runs* which
- check a student’s program progression by determining if s/he can use successfully completed modules to fulfill *requirements* of academic and *assessment* rules.

Besides explaining essential academic objects and their long term impacts, this cookbook explains how to approach Student Lifecycle Management projects from an interdisciplinary perspective.

Departments that need to be involved from the planning stage onwards include e.g.:

**Central departments and faculties**
- for analysing study regulations and examination regulations and transferring them to the academic structure, including new and/or updated rules.

**Financial Department**
- for student fee related processes and cost distribution between organizational units like faculties

**HR department**
- for regulations regarding teaching resources and workload

When setting up the academic structure, you “design” the appropriate structure by putting the relevant objects (such as different organizational units of the institution) in relationship with one another. You carefully need to define rules and regulations between objects and access rights to organizational and academic data.

Also, early in the project planning architectural aspects such as data exchange topics between SAP SLCM and other SAP solutions or third party applications are of relevancy. That can concern the inclusion of existing customer legacy systems into the planned architecture or the integration of Learning Management systems and resource scheduling tools with SLCM.

This academic structure cookbook focuses on a standard SLCM project and describes how to build an academic structure that is suited to support academic processes which are part of an academic lifecycle. The described processes use functionality of SAP SLCM without the inclusion of additional solutions.

The information provided here does not replace any training material but rather seeks to provide project related guidance and best practices from a process oriented perspective.
2. Before your start

In order to understand organizational structures and business processes that impact the implementation project and specifically the design of the academic structure we advise that you take the following questions and use them as a starting point in your initial discussion with project team members. The answers to these questions shall help to scope the solution and estimate the implementation effort:

1.1. Describe the structure of the institution and provide details of its business units (e.g. departments, faculties) and the reporting structure between them. These questions should be defined in more detail with the SAP HCM responsible persons. Most of the time SLCM customers already have an SAP HCM organizational structure in place.

1.2. Does the institution have multiple campuses? If yes, please provide details on their numbers, their organization/business units and the reporting structure and responsibilities between the main campus and other campuses.

1.3. What are the core business processes performed at the main and the related campuses?

1.4. Indicate which functions/processes are centralized/decentralized at the University.

1.5. Describe how employees are categorized (e.g. administrative, academic, etc.) and specify key functions that they perform.

1.6. Describe the academic offerings (e.g. types of programs/courses) provided and indicate the units within the University responsible for these offerings.

1.7. Are the academic offerings standardized or do they differ between the main and regional campuses?

1.8. What is the total student population number? Provide details on types and categories of students.

1.9. Identify the academic processes that require a formal approval procedure and provide details of each procedure (e.g. admissions).

1.10. Identify academic processes that represent mass processing activities. Evaluate in a second step whether the related data is processed in the SLCM related standard scenario individually or via mass process.

1.11. Describe how authorization privileges are granted (e.g. along the lines of the academic and/or administrative processes performed). In other words: are they role based or structural authorizations?

1.12. Identify the workflow wishes for the academic processes and align them with the (new or current) organizational structure.

1.13. Identify early in the project business processes which involve high data volume and check optimization options related to academic structure configuration. In general, stress testing will be crucial in the context of high data volume loads and must be accommodated in the project plan with sufficient time.
3. Core of the Academic Structure

3.1. Internal Academic Structure

3.3.1. HR PD framework
The HR PD framework is the starting point in a SAP Student Lifecycle Management project and its academic structure. It is built completely within the HR PD object oriented model. The following picture provides an overview on the SAP SLCM academic structure, its objects and its object types.

The maintenance dialogs for the academic structure are the same as for the Organizational Management (OM) framework and for the Training and Event Management (TEM) framework.

3.3.2. Basic transactions
The following are the basic transactions for setting up and maintaining the academic structure in SLCM:

- PIQ_ACSTRUC - Program Catalog
- PIQACSTAGEVIEW - Stage Display
- PIQ_ACCATLG - Module Catalog
- PIQCAM - Academic Calendar
- PIQSC – Program
- PIQCG - Module Group
- PIQSM – Module
- PIQCW - Miscellaneous Academic Work
- PIQRC - Edit Rule Container
• PIQRULEMODULE/PIQAUDSD - Edit Rule Module
• PO04 - Business Event Type
• PO04 - Business Event Type
• PIQEO - External Organization
• PIQSU - External Subject
• PIQEQQ - External Qualification
• PIQEQ - External Qualification
• PIQEX - Exchange Program
• PIQ_XML00 - Generate XML Files

Via transaction SE93 you can search on all SAP SLC M transactions. Please use search term PIQ*.

The following transactions which originate in the SAP HCM solution can also be used for maintaining SAP SLCM objects and infotypes:

• PP01 – Maintain objects
• RE_RHCOPY00 – Copy objects
• PO10 - Organizational unit
• PPOME - Change organizational unit
• PPOCE – Create organizational unit
• PPOSE – Display organizational unit
• PSO4 – Infotype individual maintenance
• RE_RHDESC10 - Display infotypes
• RE_RHRENZ4 - New end date
• RE_RHBEGDA0 - New start date
• RE_RHTRANS0 – Translate

The following transactions can be used for reporting on objects and infotypes:

• S_AHR_61016532 - Infotype reporting
• S_AHR_61016531 - Display and maintain infotypes
• S_AHR_61016530 - PD graphics interface
• S_AHR_61016527 - Existing objects
• S_AHR_61016493 - Organizational structure

3.3.3. Object Types

Student Lifecycle Management specific object types are characterized by the following:

- Object types (e.g. SM) classify objects (e.g. study modules)
- No general name convention is applied
- Each object is assigned to just one object type (SM = study module)
- The following classification exists:
  - Internal object types
  - External object types
  - Others (not registered)
- Internal objects have a data entry in table HRP1000 (Access with SE16(n), SM30, etc).
- External objects like EO, SU, EQ also have a data entry in Table HRP1000.
- Object Types are maintained in IMG – Student Lifecycle Management – Basic Settings - Object Type Modeling Enhancement – Object Type – Maintain Object type.
3.3.3.1. Examples of relevant internal and external object types

- **Organizational Management:**
  - Internal: Organizational Unit (e.g. Department of History)

- **Personnel Management:**
  - External: Employee (e.g. Marie Curie)

- **Student Lifecycle Management:**
  - **Student Administration:**
    - Internal: Student (e.g. Andrew London)
    - External: Application (e.g. Andrew London’s (ISR) admission application)
  - **Academic Structure:**
    - Internal: Program of Study (e.g. Bachelor of History)
  - **Class Scheduling**
    - Internal: Event Package (e.g. Introduction to World History)
  - **Student Financials**
    - Not registered: Student Account (e.g. Andrew London’ (PSCD) Student Account)

3.3.4. Number ranges

Number ranges within the HR-PD framework and SAP SLCM provide a unique ID number (max 8 digits) to a HR-PD object, e.g. the SC-object (Program of Study). Please note that each object type can have an own number range. This will increase the number of ID's per object type to 99-million (maximum).

The object ID is a technical numeric ID and does not have any academic or logical context.

The setup of number ranges can be found in the **IMG – Student Lifecycle Management – Basic Settings - Number Range Maintenance**
3.3.5. Infotypes

SLCM-specific Infotypes (1700 – 1799) are maintained in IMG – Student Lifecycle Management – Basic settings – Object Type Modeling Enhancement – Infotype, Country specific Infotypes, Relationship

Example: Module Group -> Infotype 1733 Module Group Data: Module Group Category

*Change View “Infotypes per object type”: Overview*

- Other Infotypes:
  - 1002 - 1999 PD-Framework
  - 0001 - 0999 Personnel administration

*The range 1700 – 1799 is reserved for SAP SLCM infotypes.*

- In SLCM information can be stored in
  - Standard infotypes
  - Enhanced standard infotypes
  - (New) Customer infotypes

- Report RHBEGDA0 can be used to set a new begin date for infotype/subtype
- Same **authorization concept** as HR PD applies:
  - Infotype authorization (PLOG)
  - Structural authorization

- Relevant standard Infotypes include:
  - 0001 Org. Assignment
  - 1000 Object
  - 1001 Relationships
  - 1002 Verbal Description
3.3.5.1. Time Dependency for Infotypes: Validity Period and Key date

Validity Period
- Every infotype has a time dependency – histories for data. Each Infotype record uses a start and end date to specify the validity date of Infotype data:
  - Fields BEGDA ‘Start date’ and ENDDA ‘End dates’ of the infotype key determine its validity period.
  - BEGDA and ENDDA of Infotype 1000 determine the validity period of the object itself. The object exists from the start date to the end date.
  - BEGDA and ENDDA of Infotype 1001 determine the validity period of the relationship between two objects.
  - BEGDA and ENDDA of any other Infotype determine the validity period of the attributes stored in the infotype.
  - The validity period of any infotype >= 1001 must be within the validity period of infotype 1000.
- The validity period enables user to evaluate key data or periods in the past, present or future.
- The validity of an object’s relationships and attributes can exist only within the life span of the object defined in the Object infotype.

Key Date
- Contains the key date and describes how the system derives this date.
- **Dependencies**: The key date description depends on how the system derives the key date:
  - 1. System date
  - 2. Start date of the academic period (year and session)
    The system derives the key date from the start date of the academic session in the given academic year.
  - 3. User-specific selection date
  - 4. Current academic year
    The system derives the key date from the start date of the current academic year.

To select and maintain objects, the correct key date has to be set in order for the system to derive this date: The key date has to be in the life span of the object. Otherwise it is not visible that the object exists.

3.3.5.2. Time Constraints for Infotypes
- Time constraints determine additionally how the validity periods of infotype data records interact.
- Time constraints can be defined at different levels:
  - Infotype
  - Object type and infotype
  - Object type, infotype and subtype
    - e.g. Subtype = Relationship Type
  - 0 = May only be present once
  - 1 = Without gaps: A maximum of one infotype record of the same type for the same object at the same time and no gaps in time between valid records.
  - 2 = With gaps: A maximum of one infotype record of the same type for the same object at the same time and gaps in time between valid records.
  - 3 = Unlimited: Several infotype records of the same type for the same object at the same time and gaps in time between valid records.
Examples

- Time constraint 1: Infotype *Personal Data 1702* which describes attributes for object type ST. Students must have a unique identification which is valid without time gaps.
- Time constraint 2: Infotype *Study Segment 1769* assigned to object type SC. The program of study has one unique identifier but can be interrupted.
- Time constraint 3: Infotype *Sessions of Offering 1739* assigned to object types CE, CI, E, EL, SE, and SM. Several records exist for the same objects with time gaps in between.

### 3.3.6 Relationships

- Relationships define links between individual object types in the system.
- Student Lifecycle Management-specific relationships can be found in the following range: A/B 500 – 549

**Example:**

Program of Study (SC) uses relationship A506 for rule container RC

- Relationship types are defined in table T778V by a 3-character CHAR string – relationship type.
- Relationships are generally defined in two directions:
  - **A** = bottom up
  - **B** = top down

- Direction + relationship type = subtype of Infotype 1001
- Transaction OOVK lists all allowed relationships between objects, here e.g. for Program of Study (SC):

<table>
<thead>
<tr>
<th>OT</th>
<th>Object type text</th>
<th>A/B Rel</th>
<th>Relationship name</th>
<th>RelObjType</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>Program of Study</td>
<td>A 050</td>
<td>Is responsibility of</td>
<td>P</td>
</tr>
<tr>
<td>SC</td>
<td>Program of Study</td>
<td>A 500</td>
<td>Consists of</td>
<td>CG</td>
</tr>
<tr>
<td>SC</td>
<td>Program of Study</td>
<td>A 500</td>
<td>Consists of</td>
<td>CW</td>
</tr>
<tr>
<td>SC</td>
<td>Program of Study</td>
<td>A 500</td>
<td>Consists of</td>
<td>SM</td>
</tr>
<tr>
<td>SC</td>
<td>Program of Study</td>
<td>B 501</td>
<td>Is Offered by</td>
<td>O</td>
</tr>
<tr>
<td>SC</td>
<td>Program of Study</td>
<td>B 509</td>
<td>Uses</td>
<td>RC</td>
</tr>
<tr>
<td>SC</td>
<td>Program of Study</td>
<td>A 510</td>
<td>Uses (for Calendar)</td>
<td>CA</td>
</tr>
<tr>
<td>SC</td>
<td>Program of Study</td>
<td>B 514</td>
<td>Is Template for</td>
<td>CS</td>
</tr>
<tr>
<td>SC</td>
<td>Program of Study</td>
<td>B 522</td>
<td>Includes Cohort</td>
<td>CO</td>
</tr>
<tr>
<td>SC</td>
<td>Program of Study</td>
<td>A 528</td>
<td>Imparts</td>
<td>CQ</td>
</tr>
<tr>
<td>SC</td>
<td>Program of Study</td>
<td>A 529</td>
<td>Needs Prerequisite</td>
<td>CQ</td>
</tr>
<tr>
<td>SC</td>
<td>Program of Study</td>
<td>A 535</td>
<td>Is Contained in</td>
<td>SX</td>
</tr>
<tr>
<td>SC</td>
<td>Program of Study</td>
<td>A 544</td>
<td>Is Assess. Coverage for</td>
<td>CE</td>
</tr>
<tr>
<td>SC</td>
<td>Program of Study</td>
<td>B 548</td>
<td>Comprises Assessment</td>
<td>CE</td>
</tr>
<tr>
<td>SC</td>
<td>Program of Study</td>
<td>A A03</td>
<td>Is part of college</td>
<td>O</td>
</tr>
</tbody>
</table>

The following relationships are available in standard for a Program of Study (SC) in the Program Catalog:

- Relationship 548 (comprises assessment) -> Object CE (Assessment)
- Relationship 500 (consists of) -> Object CG (Module Group)
- Relationship 528 (imparts) -> Object CQ (Internal Qualification)
- Relationship 529 (needs prerequisite) -> Object CQ (Internal Qualification)
- Relationship 500 (consists of) -> SM (Study Module)
An overview of possible relationships within the academic structure can look like this:

<table>
<thead>
<tr>
<th>Description</th>
<th>Object</th>
<th>Relationship</th>
<th>Related Object</th>
</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>O</td>
<td>A510 Uses</td>
<td>Academic Calendar (CA)</td>
</tr>
<tr>
<td>Department</td>
<td>O</td>
<td>B509 Uses</td>
<td>Rule Container (RC)</td>
</tr>
<tr>
<td>Program of Study</td>
<td>SC</td>
<td>A528 Imparts</td>
<td>Degree (CQ)</td>
</tr>
<tr>
<td>Program of Study</td>
<td>SC</td>
<td>A500 Consists of</td>
<td>Module Groups (CG)</td>
</tr>
<tr>
<td>Program of Study</td>
<td>SC</td>
<td>A500 Consists of</td>
<td>Modules (SM)</td>
</tr>
<tr>
<td>Study Object</td>
<td>CS</td>
<td>A514 Is specialization of</td>
<td>Program of Study (SC)</td>
</tr>
<tr>
<td>Module Groups</td>
<td>CG</td>
<td>B509 Uses</td>
<td>Rule Container (RC)</td>
</tr>
<tr>
<td>Modules</td>
<td>SM</td>
<td>B514 is template for</td>
<td>Event Package (SE)</td>
</tr>
<tr>
<td>Modules</td>
<td>SM</td>
<td>A507 consist of</td>
<td>Business Event Type (D)</td>
</tr>
<tr>
<td>Event Packages</td>
<td>SE</td>
<td>A512 consist of</td>
<td>Events (E)</td>
</tr>
<tr>
<td>Event Packages</td>
<td>SE</td>
<td>A507 consist of</td>
<td>Business Event Type (D)</td>
</tr>
<tr>
<td>Events</td>
<td>E</td>
<td>A020 is specialization of</td>
<td>Business Event Type (D)</td>
</tr>
<tr>
<td>Student</td>
<td>ST</td>
<td>A502 belongs to</td>
<td>University (O)</td>
</tr>
<tr>
<td>Student</td>
<td>ST</td>
<td>A513 pursues</td>
<td>Study Object (CS)</td>
</tr>
<tr>
<td>Student</td>
<td>ST</td>
<td>A517 has study</td>
<td>Study Object (CS)</td>
</tr>
<tr>
<td>Student</td>
<td>ST</td>
<td>A506 completes</td>
<td>Module (SM)</td>
</tr>
<tr>
<td>Student</td>
<td>ST</td>
<td>B025 takes part</td>
<td>Event (E)</td>
</tr>
<tr>
<td>Student</td>
<td>ST</td>
<td>A515 is advised by</td>
<td>Employee (P)</td>
</tr>
<tr>
<td>Student</td>
<td>ST</td>
<td>A502 belongs to</td>
<td>Location (F)</td>
</tr>
<tr>
<td>Study Object</td>
<td>CS</td>
<td>A514 is specialization of</td>
<td>Program (SC)</td>
</tr>
</tbody>
</table>

3.3.6.1. Additional Relationship Data I

This "Infotype" at the relationship holds attributes that cannot be stored in isolation as infotypes for the objects in question because they only refer to the specific relationship between two objects.

- Example: "mandatory" relationship between a program of study (SC) and a study module (SM)

Table T77AR includes the name of additional data structure (PADnn) for relationship type.

The subtype concept is a possibility to classify the information to be stored in an infotype.

- Example: Relationship 506 completes has different additional data than relationship 513 pursues has. Therefore additional data cannot be stored in table HRP1001 which contains records for all relationships. It must be stored in a separate transparent table HRPADnn which exists for each additional relationship data structure. The link between HRP1001 and HRPADnn is realized by a pointer (field ADATANR) which is internally determined.
3.3.7. Important Customizing Tables for Data Model in Personnel Planning

- T7780/T7770 Object Types
- T77EO External Object Types
- T778V/T777V Relationships
- T7777E Allowed Relationships
- T77AR Additional Data on Relationships
- T777Z Infotype Time Constraint
- T778T/T777T Infotypes
- T777I Infotypes per Object Type
- T778U/T777U Subtypes

3.3.8. Evaluation paths

Evaluation paths are defined in the standard system in connection with the definition of rules and views. They instruct the system which object types and relationship(s) are to be included in an evaluation of the organizational plan. One or more relationships are then used as "navigation paths" for evaluating structural information in the organizational plan (relating to the organizational or reporting structures) or matrix organization. The sequence of the relationships included in the evaluation path is decisive in how the results of the evaluation are displayed.

Available evaluation paths include both elementary evaluation paths with just one relationship (Example: A003 belongs to, B007 is described by) and the complex evaluation paths (Example: Evaluation path O-S-P describes the relationship chain Organizational Unit > Position > Employee (= internal persons per organizational unit)).


SLCM-specific evaluation paths: PIQ*(some others exist)
3.3.8.1. Authorizations and academic structure

This section describes the close link between the academic structure and authorization assignments. For details on the subject and configuration guidelines please consult the Authorization Concept for Student Lifecycle Management which is available in the SCN for Higher Education and Research.

Authorizations checks in SLCM consist of the basic authorization and the structural HR authorization:

- **Basic** authorization determines whether a user is allowed to execute a certain function.
- **Structural** authorization determines the objects for which a user is allowed to execute functions (display and/or maintain). It is therefore linked closely to the academic structure.

Example: With structural authorization you can restrict module booking authorization of a user to modules that are offered by a specific department or faculty.

Those objects which a user is allowed to access are determined based on evaluation paths (see 3.1.8.). They describe the chain of relationships that exist between objects in a hierarchical structure.

<table>
<thead>
<tr>
<th>No.</th>
<th>Obj. type</th>
<th>AVB</th>
<th>Relationship</th>
<th>Relationship name</th>
<th>Priority</th>
<th>Rel.obj.type</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>O</td>
<td>A</td>
<td>510</td>
<td>Uses (for calendar)</td>
<td>*</td>
<td>CA</td>
</tr>
<tr>
<td>20</td>
<td>SC</td>
<td>A</td>
<td>510</td>
<td>Uses (for calendar)</td>
<td>*</td>
<td>CA</td>
</tr>
<tr>
<td>30</td>
<td>SM</td>
<td>A</td>
<td>510</td>
<td>Uses (for calendar)</td>
<td>*</td>
<td>CA</td>
</tr>
<tr>
<td>40</td>
<td>O</td>
<td>A</td>
<td>501</td>
<td>Offers</td>
<td></td>
<td>SC</td>
</tr>
<tr>
<td>70</td>
<td>SC</td>
<td>B</td>
<td>514</td>
<td>Is template for</td>
<td></td>
<td>CS</td>
</tr>
<tr>
<td>80</td>
<td>CS</td>
<td>B</td>
<td>513</td>
<td>Is pursued by</td>
<td></td>
<td>ST</td>
</tr>
</tbody>
</table>

Relevant Menu Path: **Student Lifecycle Management -> Basic Settings -> Authorizations**

Function group RHGO contains function modules that are useful for maintaining structural profiles:

- RH_GET_ORG_ASSIGNMENT: Get organizational assignment of user (via employee, position)
- RH_GET_PERSON_FROM_USER: Assignment of a user to a personnel number

One or more relationships are used as “navigation paths” for evaluating structural information in an organisational plan:
When defining details of the academic structure the following steps are essential in regards to authorization:

- Analysis of the organizational assignment of staff members within the institution
- Analysis of structural authorizations needed for these members
  - Selection of the required restriction within the organization
  - Selection of the required evaluation paths
- Comparison of the evaluation paths delivered by SAP / analysis how they fit to institutional requirements
- Analysis of required roles in the University
- Analysis of the authorizations needed for these roles:
  - Selection of required authorization objects
  - Selection of required transactions
  - Selection of required infotypes
  - Creation of contract account data
  - Comparison of roles delivered by SAP and fit/gap analysis in regards to defined requirements
- Customization of roles using transaction PFCG
- Assignment of roles to users

SLCM allows separate maintenance of authorizations for different academic structure objects by using the two different catalogs:

1) Program catalog for defining program content
2) Module catalog for defining module content

Example scenario for setting up authorizations

The organizational and academic structure described here is the basis for the example scenario below:

- Organizational structure consisting of several hierarchies:
  - University (academic top org unit) -> School -> Department -> Faculty
- HR positions are linked to organizational units, positions of employees (P) are assigned to HR positions (S)
- User (US) is linked with the employee (P) by maintaining infotype Communication (0105) and Subtype System user name (0001) for the employee (P) in transaction PA30.
- Departments offer programs of study (SC) and specializations (CG)
- Faculties offer modules (SM)
- Advisors are directly assigned to student records.

A faculty member is responsible for maintaining module data for all modules offered by his/her department. S/he needs to display all modules to students that are enrolled into a program offered by that department.

Configuration:

- To determine the root object of the structural authorization, function module RH_GET_ORG_ASSIGNMENT is used. In the case given above, the function module determines the root organizational unit of the faculty member.
- This is done by evaluating infotype Communication (0105), Subtype system user name (0001) of the user. Via this infotype the personnel number is derived.
- With the personnel number, object Person (P) is determined which can be used to derive position (S) and organizational unit (O).
- Based on the organizational unit, two evaluation paths are used to derive the objects.
• Two new authorization profiles (TCode OOSP) are required:
  • One for maintaining the modules offered by the department of the faculty member
  • One for displaying all modules to students that are enrolled to a program offered by the department

Note: For performance of the structural authorization limit the number of objects that need to be checked!

4. External Academic Structure

The external academic structure is separate from the ‘internal’ academic structure. The external academic structure is used to map, create and maintain external universities, schools and their academic offerings.

• The external educational history can be used as input for:
  • Admissions (audit) requirements: Admissions requirements can include school degrees, specific school subjects or results from a former higher educational career.
  • You can use the equivalency determination tool to acknowledge academic work done at external institutions for internal academic requirements.
  • Degree audit requirements.

The external academic structure of SLCM is not designed to map a large number of external organizations and their offerings! Rather it is suggested to setup the external organizations and their offerings in a general way, e.g. German Universities (EO), German Bachelor Degrees (EQ), biology course (SU) instead of specifying details. If not, all German universities, their specific degrees and courses had to be set up which is not a suitable approach.

You can configure the external academic structure while setting up the internal structure or add it at a later point in time. Try to keep its structure as simple as possible.

EO – External Organization
SU – External Subject
EQ – External Qualification
EX – Exchange Program

• Internal Academic Structure: IMG – Student Lifecycle Management – Student Lifecycle Management Master Data - Academic Structure
• **External** Academic Structure: IMG – Student Lifecycle Management – Educational Background – External Organization, External Subjects, External Qualification

In Student Lifecycle Management you should only create those external organizations (object type EO) and external subjects (object type SU), which you need for entering external academic achievements.

Take the following inheritance principle for external subjects into account:

External organization (EO) inherits external subjects (SU) offered by its higher-level external organizations. For a course which is offered by all schools of a particular type, these schools can be grouped under one external organization and this course (as SU) be grouped to this organization and not to each individual school. When determining equivalencies (→ Equivalency Determination), the system considers the external subject environment of the specific external organization.

**Exchange programs**

The Exchange program is another external academic object (SX) that can be used for the following:

- Information on exchange students who come from another Higher Education institution
- Information about the exchange programs a student attended during his or her studies

The SX object can be maintained via transaction PIQSX and can be setup in relation to an external organizational unit. Below is an example of a structure with an SX object and related SLCM objects:

![Diagram of Exchange Program Structure](image)

The Exchange Program information is kept in the following infotypes of object "Exchange Program" (SX):
- Exchange Program Data (1713)
- Description (1002)
- Requirement Catalog (1778)
- Relationships: Uses Calendar (A510), is offered by EO/O (A534), contains Program (B535)

**Customizing:**

The IMG settings for defining Exchange Program attributes are as follows:

- **Student Lifecycle Management** → **Master Data in Student Lifecycle Management** → **Academic Structure** → **Exchange Programs**
- **Student Lifecycle Management** → **Master Data in Student Lifecycle Management** → **Educational Background** → **External Organizations**
5. SAP SLCM Academic Structure process Overview

Below you find the business process steps to build an academic curriculum offering in SAP SLCM. Some steps are directly related to SAP HCM and may already be defined in a project where SAP HCM is in place.

5.1. Curriculum Management

5.1.1. Maintain Organizational Structure
1. Define top organizational unit (O) *(SAP HCM related)*
2. Define organizational units (O) *(SAP HCM related)*
3. Define academic position (object S) *(SAP HCM related)*
4. Define academic staff (object P) *(SAP HCM related)*
5. Define academic calendar *(SAP HCM related)*

5.1.2. Maintain Academic Calendar
1. Define academic years and periods (CA) *(SAP SLCM related with integration to SAP HCM Factory/Holiday calendar)*
2. Define timelimits (CA) *(SAP SLCM related)*

5.1.3. Maintain Academic Programs
- Define programs of study (SC):
  1. Select offering org. unit
  2. Define program plan (stages) *(Optional)*
  3. Define program type (e.g. CE=Continuing Education, GR = Graduate, UG = Undergraduate, PR = Professional, etc.)
  4. Define progress classification (e.g. Freshman, Sophomore, etc.)
  5. Define session variant (semesters, terms, etc.)
  6. Define fee category (standard undergraduate fee, standard post graduate fee)
- Define qualifications (CQ):
  1. Define degree type (B.A., Ph.D.)
  2. Define degree level (UG/Grad.)
- Define module groups / specializations like Majors, Minors and concentrations (CG):
  1. Define module group category (Maj./Min., opt./req.)
  2. Define fee category
- Define study modules and organizations which offer them (SM):
  1. Define offering org. unit (including pre- and co-requisites) and set up disciplines
  2. Define capacity
  3. Define module credits
  4. Define academic levels
  5. Define stage where module is offered (for staged programs) *(Optional)*
  6. Define fee category
- Define event type (D)
  1. Define category
2. Define teaching method
3. Define delivery method (e.g. classroom based)
4. Define appraisal type *(optional)*
5. Define capacity
6. Define relationships (‘held by’ and ‘requires’)

- Define event packages (SE) including fee category
  1. Define capacity
  2. Define sessions of offering
  3. Define event package data

- Define events (E)
  1. Define location
  2. Define status
  3. Define schedule (dates, time, resources)

- Optional: Define assessment (CE)
  1. Define assessment category
  2. Define audit type *(optional)*
  3. Define assessment data

- Optional:
  Publish academic catalog:
  
  In order to keep the online university course catalog up to date (e.g. when you have created new modules or changed modules) you can extract the backend academic structure as XML-file and store it on an external server. An automatic update process can be implemented on the server for this procedure. Example report RHIQDEMOXML_ACADSTRUC, Variant „VA TOPORG“ selects all objects from top org unit to modules. It can be started whenever the online course catalog must be updated.
  
  Please note that it exports single XML files. The files can subsequently be used by the web team of university to incorporate them in the main website of the university.

5.1.4. **Maintain Audits**

1. Optional: Maintain Admission Audits
   1. Define admission audit requirements
   2. Associate programs with admission audit

2. Optional: Maintain Degree Audit
   1. Define degree requirements
   2. Associate courses with degree requirements
6. Academic Structure in detail

6.1. Definitions

<table>
<thead>
<tr>
<th>Object</th>
<th>Object Name</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>Organizational Unit</td>
<td>Organizational structure of an institution. Can be arranged in a hierarchy of departments, faculties, etc.</td>
</tr>
<tr>
<td>SC</td>
<td>Program of Study</td>
<td>• academic offering (=combination of study modules) of an educational institution which fulfills the requirements for a degree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• leads towards a qualification (e.g. degree/certificate)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• can be attached to at least one responsible organizational unit</td>
</tr>
<tr>
<td>CG</td>
<td>Module Group</td>
<td>Module groups are used to organize modules into</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Logical groupings (e.g. compulsory/optional study modules): These groupings allow to define and create academic rules, e.g., take all</td>
</tr>
<tr>
<td></td>
<td></td>
<td>modules in group “Compulsory”, take two modules from group “Electives”, etc.). Module Groups are used in Degree Audit for that purpose. Via filters</td>
</tr>
<tr>
<td></td>
<td></td>
<td>those modules are selected and can be used to fulfill academic rules. For that purpose, you should separate Undergraduate from Graduate Majors!</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Specializations (e.g. Majors / Majors): These groupings enable students to book a specialization during program registration. For example,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the Bachelor of Business Administration has a Major in Banking and Finance. Academic rules are assigned to the module groups to specify the modules required to achieve the Major and Minor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Learning Communities (relating event packages of modules (sections): You can relate event packages to a module group = Learning Community and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>designate sections of a course as ‘Distance Learning’ (via ‘Special Course Type’ Module Group Category). Learning Communities improve search</td>
</tr>
<tr>
<td></td>
<td></td>
<td>capabilities when students book courses, e.g. a module has 50 sections of which only two represent Distant Learning courses. Students use Learning Communities as search criteria to quickly identify them.</td>
</tr>
</tbody>
</table>
Example 1: Program of Study with Module Groups as required study modules and optional study modules

<table>
<thead>
<tr>
<th>Nodes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC_INF</td>
<td>Bachelor of Science Informatics</td>
</tr>
<tr>
<td>Imports</td>
<td>Comp. &amp; Elective Subjects in Informatics</td>
</tr>
</tbody>
</table>

- **BSC_INF1.1** Compulsory modules -- Informatics
  - IN001: Laboratory: Fundamentals of programming
  - IN002: Laboratory: Introduction to Informatic 1
  - IN003: Laboratory: Introduction to Informatic 2
  - IN004: Laboratory: Technical Informatics
  - IN005: Laboratory: Technical Informatics
  - IN006: Laboratory: Introduction to the Software engineering
  - IN007: Fundamentals: Algorithms and Data Struct
  - IN008: Fundamentals: Databases
  - IN009: Fundamentals: Oper. Systems and Syst. So
  - IN010: Fundamentals: Computer Networks and Dist
  - IN011: Introduction to the Theoretical Informatics
  - IN012: Bachelor-Laboratory (Proj. System Dev.)
  - IN013: Seminar
  - IN014: Seminar

- **BSC_INF1.2** Elective modules -- Informatics
  - BSC_INF1.2.1 Software Engineering
  - BSC_INF1.2.2 Database and Information Systems
  - BSC_INF1.2.3 Artificial Intelligence and Robotics

Program of Study (SC)

Module Group (CG) as compulsory degree requirement = Summary of study modules (SM)

Module Group (CG) as optional / elective modules

Example 2: Academic Structure with module group as Major / Minor

Module Group “Banking of Finance” represents a Major in the program ‘Bachelor of Business Administration’.

<table>
<thead>
<tr>
<th>B.A.</th>
<th>Bachelor of Business Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imports</td>
<td>Bank. &amp; Fin.</td>
</tr>
<tr>
<td>B.A.</td>
<td>Banking and Finance, Code 2003</td>
</tr>
</tbody>
</table>

Module Group (CG) as Spezialization

Example 3: Academic Structure setting for module group “Learning Community”
<table>
<thead>
<tr>
<th>Object</th>
<th>Object Name</th>
<th>Definition</th>
</tr>
</thead>
</table>
| RC     | Rule Container | A rule container is a SLCM object in which you can collect rules to be checked at certain points within a process. Rules in the rule container are activated by attaching the rule container to a callup point.  

**Example 1:** Only regular students are allowed to enroll in the program of study Fine Arts. During enrollment, the module group to which a student is assigned is checked.  

**Example 2:** Rule Containers contain requirements or requirement templates students must fulfill in order to complete a program of study. They are assigned to the relevant SC object in the academic structure. Requirement catalogs are used to structure these requirements.  

Scenario example: Pre-requisite requirements for a module require a student to complete 3 out of a list of 5 possible modules. |

Note: You can automate the process of creating rule containers. The respective program must be used by the administrators who are authorized to create rule containers and assign them to academic objects.

**Example 1: Rule Container for Program of Study Fine Arts into which only regular students can enroll**
Note: The SAP system does not contain predefined rule containers. When you create them, try to keep rules in the academic structure set up simple!

<table>
<thead>
<tr>
<th>Object</th>
<th>Object Name</th>
<th>Definition</th>
</tr>
</thead>
</table>
| CQ     | Qualification | Students acquire (internal) qualifications in the course of their studies. They can be conferred for a program (program completion), a stage (stage completion) or without a program reference.  

**Example:** Program of Study Bachelor of Science Informatics imparts qualification Bachelor of Science. |

---

**Example 1:** Program of Study Bachelor of Science Informatics imparts qualification "B.SC."

- BSC_INF Bachelor of Science Informatics
- Imparts
  - B.SC. Bachelor of Science
- BSC_INF1 Comp. & Elective Subjects in Informatics
- BSC_INF2 Required Subject -- Mathematics
- BSC_INF3 Techn. foundation & additional modules
- BSC_INF4 Modules in application
- BSC_INF5 Bachelor Thesis

---

<table>
<thead>
<tr>
<th>Object</th>
<th>Object Name</th>
<th>Definition</th>
</tr>
</thead>
</table>
| SM     | Study Module | • Modules are academic courses (classes, lectures, etc.) which define the content of a program of study. They can also represent a more generic type of academic work (e.g. a thesis).
- Modules can be either mandatory, optional, or co-requisite.
- They can be offered as one event or as a number of events.
- A module can be used in different programs of study.
- Modules are courses that students can book (register for), prebook (pre-register for), and get grades and credits for.

**Example 1:** Students who want to enroll in course Laboratory: Fundamentals of Programming will first have to enroll in course 'Introduction to Informatics'.

**Example 2:** To identify modules as first year module, second year module, etc., they can be categorized. You either group introductory modules into *module group (CG)* "First year modules" or you use academic levels to categorize them.

**Example 1:** 'Introduction to Informatics 1’ is co-requisite for “Laboratory: Fundamentals of Programming”
Note on conditional booking: If academic rules allow conditional booking, students can enroll in the laboratory class without having yet completed the co-requisite course.

**Example 2:** Third year module “International Economics” has academic level 3. First year modules would have academic level 1, second year modules level 2, etc.

<table>
<thead>
<tr>
<th>Module</th>
<th>EC312</th>
<th>International Economics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning Status</td>
<td>Active</td>
<td></td>
</tr>
<tr>
<td>Start Date</td>
<td>01.01.1988  to 31.12.9999</td>
<td></td>
</tr>
</tbody>
</table>

**Module Data**

| Academic Level    | 3 Level 300 (undergraduate) |

<table>
<thead>
<tr>
<th>Object</th>
<th>Object Name</th>
<th>Definition</th>
</tr>
</thead>
</table>
| E      | Business Event  | • Event with set start and end dates which has been created from a business event type (see below).  
• Takes place at a specific location and requires resources (e.g. rooms)  
• Is created anew in each event planning period |
| SE     | Event Package   | • Combination of business events which are offered for a module or a business event type in an academic session.  
• Can either be a reusable, long-lived or a short-lived object which is used only for one event planning session. |
| D      | Business Event Type | • Business event types serve as templates for planning and creating concrete business event offerings  
• They contain resource types (P, R, etc.) and other attributes (e.g. delivery mode) required for scheduling business events.  
• Can be used by different study modules. |

Summary:

- Modules (SM) contain the business event types (D) which serve as templates for creating events (E).
- Required business event types must be created in the module catalog before the event planning starts.
A business event type attached to a module reflects a compulsory academic event which students who book the module must attend.

**Example 1:** Business Event (E) is scheduled based on Business Event Type (D) "Introduction to Informatics"

Business event E is now scheduled (weekdays, time frames with named resources (room, lecturer))
Note: Although it is possible to plan events in Training and Event Management (TEM) and in Student Lifecycle Management, you should never plan Student Lifecycle Management events using the TEM functionality! Use the event planning function in SLCM to plan and schedule events. Events you create in TEM are automatically valid for the whole client (TEM and Student Lifecycle Management event objects are the same), but events created in TEM are NOT visible in SLCM’s academic structure.

Room Reservation can be used in Event Planning only if integration is activated between room reservation and Training and Event Management. See switches in the menu path: SLCM → Master Data in SLCM → Academic Structure → Integration of Training and Event Management → Training and Event Management.

<table>
<thead>
<tr>
<th>Object</th>
<th>Object Name</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE</td>
<td>Assessment</td>
<td>• An assessment represents an exam or final test which students have to pass in order to complete a program, stage or module successfully.</td>
</tr>
</tbody>
</table>

Example 1: Module “Laboratory: Fundamentals of Programming” requires students to take an exam.

<table>
<thead>
<tr>
<th>Object Name</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC_INF</td>
<td>Bachelor of Science Informatics</td>
</tr>
<tr>
<td>BSC_INF1</td>
<td>Comp. &amp; Elective Subjects in Informatics</td>
</tr>
<tr>
<td>BSC_INF1.1</td>
<td>Compulsory modules -- Informatics</td>
</tr>
<tr>
<td>IN0001</td>
<td>Introduction to Informatics 1</td>
</tr>
<tr>
<td>IN0002</td>
<td>Laboratory: Fundamentals of programming</td>
</tr>
<tr>
<td>IN0001-Exam</td>
<td>Introduction to Informatics 1 - Exam</td>
</tr>
</tbody>
</table>

Assessment (CE) method = Exam

Object | Object Name | Definition |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CA</td>
<td>Academic Calendar</td>
<td>• The academic calendar contains the dates related to business processes of the university. These predefined periods are used in event planning as default values for the event planning period.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The academic calendar specifies time limits for academic and administrative processes like start dates and deadlines, fee calculation purposes, and add/drop periods for module booking.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Example: the academic calendar of the University of Europe includes time periods (time limits) for standard academic years and sessions (100, mandatory!) and class periods (200).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• If no specific time limit is maintained for certain academic processes, the processes always refer to the academic year and session.</td>
</tr>
</tbody>
</table>
6.2. Design Principles for a long term academic structure

6.2.1. Relationship between today’s academic structure and future academic processes

As mentioned before, the academic structure is the basis for all study related processes in SLCM. Degree audit is the major process during which a student’s academic work is evaluated and checked against requirements of the student’s program of study. Requirements are organized in requirement catalogues. In requirement catalogs subrequirements are created which define academic rules and filters to determine relevant study modules.

Example: The academic rule “120 credits need to be achieved in Major Economics” is designed with:

- a calculation method that counts the earned credits of the completed modules and
- a filter, that selects all modules of Major Economics.

She student will only progress towards his degree once he has fulfilled these requirements.

Important: When designing and implementing the academic structure you need to make sure that the structure you build today is suitable to design and build the requirement catalogs for audit processes later.

Student Lifecycle Management offers two planning views when working with academic structure objects:

- The first planning view focuses on long term objects within the scheduling process. Relevant for this view is the academic structure with Study Modules (SM). The next level is the Business Event Type (D) which keeps all relevant data for the scheduling. In addition, Event Packages (SE) can be created as permanent objects. This planning view focuses on a long-term data.
- The second planning view focuses on the scheduling which takes place in every academic session. It works with the creation of short-term objects such as events or time-independent events.
6.2.2. Long term versus short-term objects

6.2.2.1. Organizational Units

Organizational units of an educational institution represent long term objects. Each program of study can be attached to at least one organizational unit. This organizational unit is responsible for the program.

Before you can create academic structures, you must set up an organizational structure. The organizational structure is either created in SLCM or in the HR system. SLCM is using the same objects for the organizational structure like HCM. To create the required objects, select from the SAP menu:

*Student Lifecycle Management* → *Environment* → *Organizational Management* → *Organizational Plan* → *Organization and Staffing* → *Create*

Transaction PPOCE

Then:
- Define the *top organizational unit*. You must define a top organizational unit in each client.
- Define the institution’s complete organizational structure (schools, departments, etc.) by setting up a hierarchical structure consisting of organizational units (O) and linking them to the top organizational unit (relationship 003 "belongs to" between O and O).

**Note:**
- Organizational units do not have to be connected to the Top Org Unit.
- You can define more than one organizational unit as responsible unit for a program.

**Assumption:**
- One organization at the highest level (the University)
- Next level representing schools or colleges.
  - Underneath the schools and colleges are departments.

**Basic customizing steps in IMG:**

- *Organizational Structure* → *Organizational Management* → *Basic Settings* → *Activate Inheritance of Account Assignment Features*
  
  Enter: PPOM INHS X Inheritance of acc. ass. features by positions

- *Organizational Structure* → *Organizational Management* → *Define Top Organizational Unit*
  
  Here you must enter the object ID of the main organizational unit (i.e. the University). In the delivered template of *BC Set: ISHERCM_IAP_ORG_STRUCTURE*, Object ID ‘50000050’ (abbreviation ‘UNIVERSITY’) is defined in the following manner. You may re-use this object and rename it appropriately in transaction PP01:
Create ‘Acct. Assignment Features’ for the Organizational Unit and assign the Company Code:

6.2.2.2. Academic Calendar

The customizing steps for the academic calendar must be completed in the IMG -> Academic Years and Sessions

- Define Academic Years
- Define Session Types (e.g. semester, quarters, etc.)
- Define Academic Sessions (e.g. Fall, Winter, Spring)
- Set Up Session Groups (e.g. Admissions/Enrollment, Course Offerings) and assign them to academic sessions (e.g. Admissions periods are Fall and Spring, course offering periods are Fall, Winter, Spring, and Summer)
- Assign Academic Sessions to Academic Years (e.g.: 2012-13 Fall, 2012-13 Winter, 2012-13 Spring, 2012-13 Summer)
- Define Time Limits:
  - 0100 Standard Duration of Academic Session X
  - 0200 Class Period
  - 0300 Course Registration (With priorities)
Optional:
- ADMA Admissions Application Deadline
- APPR Grading Deadline
- GRAD Graduation Date

Define Session Variant:
- 1  Ac. year w. 2 sem  Semester  Academic Session
- 2  Ac. year w. 1 sem  Semester  Academic Year

The session variant will be assigned to the program of study.

6.2.2.3. Program of Study

Look at the following questions when designing a program of study:

1. Does the program offer different specializations?
   → Specializations need to be configured in module groups so that students can be registered to them
   → To filter all modules of a specialization the modules need to be grouped into a module group.

2. Is the program of study structured into stages?

   Stages are optional in SLCM. They structure a program of study according to a time line.
   Students in a staged program have to start at stage 1:
   - Stage 1 (CG1) is the first stage in which students can take the module group.
   - Stage 2 (CG2): Modules within this module group may not be taken by students in lower stages
     (Example: module group "Major in Finance" contains only modules from stage 2 and higher).

Stages need to be configured for the program and also taken into account when implementing audit
functionality. The modules within a module group and module groups can be assigned to one or more
stages. Students in these stages can book the modules and/or module groups. Stage audit and progression
rules determine when students are allowed to continue with stage 2.

Note: It is possible to book specializations for a selected stage. The dialog box for specialization bookings contains a
field where the user can select a stage for which the assignment is valid.
In a *stageless* program of study, modules are not structured according to a time line such as stages. The order in which students have to take modules is defined by the level of the module, course prerequisites, etc. It can be stored in rule containers or defined by creating relationships between the modules (SM is prerequisite or co-requisite of SM).

Note: Once set, attributes “with stages” or “stageless” (defined in the program plan) CANNOT be changed!

---

**Step 1 (Create Program of Study)**

Create object

Program plan: with stages/stageless

**Step 2 (Create Modules)**

Create object

SM

**Step 3 (Assignment)**

Create object

SC

Create relationship

CG

SM

First stage (rel.)

Last stage (rel.)

Mandatory/Core item

---

3. *Which are the attributes of the program of study?*

Program attributes are maintained using the IMG Path:  *SLCM >Master Data in SLCM> Academic Structure>Programs of Study:*

*• Attributes must be maintained in the program infotypes.*

*• Some attributes are essential in the configuration of student administration processes.*

*• All attributes must be set up in customizing before you can create a program of study.*

The following information is maintained in the attribute *Program Data:*

*• Program Plan: used to subdivide programs into stages (relevant in academic process: registration / stage audit)*

*• Program Type: used to define program levels (e.g. undergraduate / postgraduate). The program type definition is directly related with student classifications and progression.*

*• Session Variant: used to define the type of sessions into which the academic year is divided. The session variant defines the permitted registration and re-registration intervals and is also relevant for event planning processes.*

*• Module Group Variant: used to specify Majors/Minors*  

*• Program Duration: used to specify the (maximum) number of years students can study a program. You can check program duration by means of a rule (relevant academic process: progression)*
• **Admission Restricted/Assessment Process:** If these flags are activated, the system will not allow to register a student for a program if the admissions process has not been completed successfully (relevant academic process: admission audit).

• **Capacity:** determines the minimum, optimum, and maximum number of places in a program. It can be stored in the system and be used during admission.

• **Evaluation:** used to specify academic scales. During the grading process, academic scales are used to record module grades.

• **Fee Calculation Data:** enables you to set prices for different program categories, e.g., for undergraduate and postgraduate.

• **Program Credits:** allow to specify the number of credits required to obtain the qualification of the program. During degree audit, the required number can be checked against the total earned credits for a program based on a set of rules. You can also define the minimum and maximum number of credits students must complete in one stage if your progression rules contain this requirement.

• **Disciplines:** defines the field of study of a program. You can assign programs of study, module groups, modules and external subjects to one or more disciplines. One discipline can be defined as the “primary” discipline and used for reporting purposes. The discipline table supports the use of CIP (Classification of Institutional Programs). A CIP Code Data Load program is available in the IMG at SLCM>Master Data in SLCM>Academic Structure>Modules>Upload CIP Codes from File

• **Weighting Factor:** If more than one organizational unit offers a program (Relationship 501), you can define a percentage weighting factor which determines the contribution of each organizational unit towards the program in percentage.

The program catalog stores all available programs of study and has two different views:

• **Tree structure** of the program of study: It provides an overview of all objects included in the program of study and shows their relation to each other. When you select a program of study or an organizational unit via the object manager, the system displays the selected objects top down.

• **Graphical overview:** Here you see the program as a program plan. If the program is subdivided into stages, only this view will show you which module or module group is offered for which stage. To start the graphical overview, select a program of study within the tree structure and then choose ‘overview’.

### 6.2.2.4. Qualification

An internal qualification (CQ) is associated with the programs of study that students are pursuing (via relationship “imparts”) and are awarded during graduation processing.

Qualifications are characterized by the following characteristics:

• Attributes must be maintained in internal qualification Infotypes.

• Some attributes influence other student administration processes.

• All attributes must be set up in customizing before you can create an internal qualification.

Qualification attributes:

• **Groups:** define different sets of internal and external qualifications, e.g., you can combine the internal qualifications “Bachelor of Science” and “Master of Business Administration” in qualification group “Academic Degrees”. Diplomas and certificates can be part of qualification groups.
  
  o **Related process:** You can use a qualification group to define rules, e.g., by specifying program requirements - “Applicants must have high school diploma”.

• **Degree Type:** defines the type of diploma awarded by internal/external institutions. The degree type links a degree with a degree level. Possible degree types are Bachelor, Master, High School, etc.

• **Degree Level:** Possible degree levels are undergraduate, high school, etc. A degree level must be assigned to each degree type.
  
  o **Related process:** You can use degree level and degree type to define rules, e.g., to specify program requirements to indicate that - “Applicants must have a high school diploma”.

---

*Required Reading:**

- Student Lifecycle Management Academic Structure Cookbook
- SAP Community Network | scn.sap.com

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• **Grading Calculation Method:** calculates grades and academic honors. You can only use the grade calculation function when you confer qualifications for an *assessment process* (stage completion or graduation). You cannot use this function when you confer qualifications which are not related to a program.

• **Evaluation:** You can select a predefined scale to rate the qualification.

• **Discipline:** describes the field of study in which the internal or external qualification was acquired.

---

**Note:** The qualification discipline table refers to the same table as the disciplines for other academic objects. Internal Qualification fields are maintained using the IMG path: SLCM>Master Data in SLCM>Qualifications.

---

### 6.2.2.5. Module Group

When you set up module groups, you define the following attributes:

- **Module Group Data:** enables you to define how module groups are used within the academic structure (Organizational/Specialization/Learning Community). The purpose of the module group is determined by the relevant customizing settings.

- **Disciplines:** used to specify fields / branches of study.

- **Fee Calculation Data:** provides the ability to charge a fee for module group registration (e.g. Major / Minor bookings)

- **Fee Distribution:** used to distribute fees to various cost objects (e.g. Cost Centre/Internal Order)

- Module group attributes are maintained using the IMG Path: SLCM>Master Data in SLCM>Academic Structure>Module Groups. With the exception of disciplines which are maintained using the IMG path: SLCM>Master Data in SLCM>Academic Structure>Modules>Set up Disciplines.

Module group variants allow to define academic specializations that will be available to students during registration. Customizing steps in IMG at SLCM>Master Data in SLCM>Academic Structure>Module Groups:

1. Set up Module Group Variant/Category combinations.

   For example, the University offers programs in which students can choose either one Major (module group category “Major”) and one Minor (module group category “Minor”) or one Major and two Minors. You must define a module group variant for each of these options.

2. Define relevant module group categories as “specialization” (by setting the flag in the customizing table). Afterwards the drop down list in the module group data tab displays only those module group categories (e.g. Major, Minor) which you have maintained. It is best practice to re-use module group categories. For example, create one category to represent ‘core modules’ and re-use it in other parts of the academic structure.

3. Assign a module group variant to the relevant program of study (Program Data Infotype)

4. Assign the module groups to the program of study via the program catalog or transaction PP01 (Relationship A500)

**Optional Step**

After you have performed the above steps, you can maintain the allowed combinations of module groups via the program catalog. Use the menu path: Environment>Edit Specializations.

This function allows you to define the rules for valid and invalid specialization combinations for each of your programs of study. For example, you may have a Bachelor of Arts that requires students to select a Major and a Minor. With this function, you can explicitly define the Major/Minor combinations that are not permitted. (e.g. Math Major and Math Minor are not permitted combinations).

---

**Note:** You do not have to explicitly define all allowed combinations.

⚠️ Group modules which can be used to fulfill the same academic rule in the same module group!
6.2.2.6. Module

1. Characteristics of modules

- **Is it possible to categorize the different types of modules, e.g. as core modules or optional modules?**
  - Modules need to be indicated by type or grouped into module groups and get assigned a type
  - A filter can select all modules of a program with the flag ‘core module’
  - A filter can select all modules of a specific module group

- **Are the modules structured into year modules, e.g. 1st year module, 2nd year module, etc.?**
  - To select these modules they need to be categorized (e.g. based on an ‘academic level’)

- **Do variants exist which a student can choose in order to fulfill an academic rule?**
  - Several modules which can be used to fulfill requirements in e.g. two variants need to be grouped in module groups
  - A filter can select the modules which have to be completed together
  - A rule with a AND/OR relationship can be designed.

Modules can be either mandatory or optional courses that students can:

- Book (register for)
- Prebook (pre-register for)
- Get grades for
- Get credits for

The following applies for module attributes:

- Attributes must be maintained in the module Infotypes
- Some attributes impact other student administration processes
- All attributes must be set up in customizing before you can create a module

When you set up modules, you define the following attributes:

- **Capacity:** determines the number of students that can be booked / waitlisted on the module
- **Evaluation:** used to define the type of academic scale and appraisal templates for grading.
- **Attendance Calc. Rules:** used to specify rules for attendance calculation.
- **Program Type Assignment:**
  - Used to assign modules to program type such as Undergraduate / Postgraduate e.g. Level 100 course = Undergraduate, Level 500 = Postgraduate. This information is used in the progression process. An IMG configuration table allows the system to automatically activate or de-activate holds and customer statuses holds as a result of program type progression.
  - Example: an UG progression run for a student indicates “dismissed” -> the respective hold will go into effect if it has been activated.
- **Sessions of Offering:** Academic session within which module is taught (automatically updated)
- **Module Credits:** you can define the minimum, optimum, maximum number of credits for the module. When a student books the module, the attempted credits are derived from the module credit value.
- **Fee Calculation Data:** enables you to define different prices, e.g., full-time course, distance learning/course materials, etc.
- **Disciplines:** defines field of study of a module.
- **Module Data:**
  - The Academic Level refers to the learning content’s level; e.g. 1st year, 2nd year, 100 level, 200 level, etc. You can use this information for rules definition.
The Category is also used for business event types and can refer to lecture, workshop, etc.

The Repetition Type control the number of attempts allowed

Catalog: Controls whether a module is displayed in the catalog published on the web

The Waiting List fields are used to define or disable waiting list rules.

- Session Patterns: used as to specify timescale intervals for module offerings, e.g. "every fall".
- Teaching Emphasis: Specifies how module content is taught (e.g. written/oral assignments.)
- Fee Distribution: used to distribute fees to various cost objects (e.g. Cost Centres)
- Cohort Context: automatically updated by the cohort tool.

You can maintain modules and objects below the program level using the module catalog which is accessed via SAP Menu at Student Lifecycle Management → Academic Structure (Curriculum) → Study Planning → Module Catalog from the SAP menu, or transaction PIQ_ACCTLG.

To set up modules, start with organizational units and use the module catalog to:

- Define the modules as object types SM which are offered by a particular organizational unit (for example, all courses offered by the Department of Biology) and link them directly to the organizational unit (relationship 501 "offers").
- Create business event types connected to modules, which describe the offerings per module.
- Start the event planning process and administer the academic offerings per session, that is, define which module is offered in which session. The planning process also includes the creation of academic units w/o dates and individual work.
- Combine different events to an event package or create an event package for a module without planning the events.

Two different catalogs enable you to distinguish between authorizations, access academic data and define the different persons and departments who are responsible for catalog maintenance. You can keep the maintenance authorizations for different structures separately by using the two different catalogs:

1) Program catalog for defining program content
2) Module catalog for defining module content.

Note: Pre-Requisite checks can be maintained directly in the module catalog

You can use the module catalog to create the following required objects and relationships:

- Define the business event types that a module consists of (relationship 507 "consists of")
- Define the internal qualifications which are imparted by a module (relationship 528 "imparts").
- Define the internal qualifications which are prerequisite for a module (relationship 529 "is prerequisite of").
- Define the modules which are prerequisite for a module (relationship 529 "is prerequisite of").
- Define the modules which complement each other (modules which must be booked together) (relationship 533 "is corequisite of").
- Define module crosslistings (relationship 511 "refers to").
- Link a rule container to a module (relationship 509 "is used by").

Additional IMG settings for Modules:

- Modules -> Define Categories
Examples:

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
<th>Individual work</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND</td>
<td>Independent Study</td>
<td>X</td>
</tr>
<tr>
<td>INT</td>
<td>Internship</td>
<td>X</td>
</tr>
<tr>
<td>SEM</td>
<td>Seminar</td>
<td></td>
</tr>
<tr>
<td>STD</td>
<td>Standard Course</td>
<td></td>
</tr>
<tr>
<td>THE</td>
<td>Thesis</td>
<td>X</td>
</tr>
<tr>
<td>OTH</td>
<td>Other (no Individual Work)</td>
<td></td>
</tr>
<tr>
<td>OTHI</td>
<td>Other (w/ Individual Work)</td>
<td>X</td>
</tr>
</tbody>
</table>

Note: Module categories marked Individual work cannot have an event but an individual work assigned.

- **Modules -> Define Repetition Types**
  (BC Set: ISHERCM_IAP_MODULES)
  Examples:
  - **STDA** Standard (requires approval)
  - **UNLA** Unlimited Graded (requires approval)
  - **GRBA** Grade-Based (requires approval)
  - **STD** Standard (no approval)
  - **UNL** Unlimited Graded (no approval)
  - **GRB** Grade-Based (no approval)
  - **NONE** Not Allowed

- **Modules < Define Alternative Assessment Methods for Modules**
  (BC Set: ISHERCM_IAP_MODULES)
  Examples:
  - **AUD** Audit Course Grade Allocation Not Possible X X
  - **PF** Pass/Fail Passed/Failed

These settings allow for follow-up processes related to students who wish to audit courses or take them as Pass/Fail options.

6.2.2.7. Business Event Type

You must create business event types in the module catalog before you begin event planning.

- A business event type can be used in different modules. A module can be used in different programs of study. **You can share an event type across multiple modules if students have to attend the same event type.**
- Each business event type attached to a module reflects a compulsory academic event which students who book the module must attend. A student must attend one event for each business event type in a module in order to complete the module.
Resources can be assigned to events in two ways:

- **Planned Resources:**
  - The event type stores the required resource types.
  - The resource type contains the necessary resources for the event.
  - Concrete resources are selected when planning the event.
    - Example: all persons related to a business Event type via relation "is held by."

- **Temporary Resources:**
  - Temporary resources (which are not defined by resource types) can be assigned directly to an event.
  - Temporary resources can be assigned by using the user-defined "Free Search" when selecting resources.
    - Example: the event type has no assigned Instructors. But in this case, you wish to add an instructor directly to the event.

The business event type category determines whether an event is set up as time-dependent or time-independent in form of the "Delivery Mode". Events without a schedule are time-independent.

Delivery Modes of event types can be:

- DIST Distance-learning (scheduled) Business Event
- DISU Distance-learning (unscheduled) Time-Independent Event
- LAB Lab session Business Event
- LECT Lecture (classroom) Business Event
- SELF Self-study Time-Independent Event
1) The Business Event Type (Object Type D) serves as the blueprint for Events (Object Type E). You can create one or more Events from one Business Event Type.

2) The Business Event Type (D) also serves as blueprint for Time-independent Events (EL). These Events do not have a schedule and can be used to plan Self-Study offerings.

3) A Time-independent Event can also be used to map Event offerings which do not yet have a time schedule. The Event is first created as a Time-independent Event (EL) and later changed to a Event (E) when a schedule and resources are assigned.

Note: To create a time independent event for self-study purposes, the relevant delivery mode (e.g. distance learning) must be specified on the business event type. Once this delivery mode has been assigned it is not possible to change the time-independent event to a “normal” Event. Therefore: Ensure that a time-independent delivery mode is not assigned to these “temporary” EL Objects.

6.2.2.8. Rule Containers

When setting up rules keep in mind: the simpler a rule, the more generic performance indices, conditions, and filters can be defined. Callup points are a key instrument during the definition of rules.

Student Lifecycle Management distinguishes between

- **Academic callup points**: Academic callup points are used to assign rule containers to objects of the academic structure via relationship 509 “uses/is used by” (SAP menu: Student Lifecycle Management > Academic Structure (Curriculum) > Study Planning > Program Catalog or Module Catalog.) A rule container that is related to an object of the academic structure is valid for that specific object and for objects in the academic structure that inherit the rule container. The callup point is a mandatory attribute of the relationship. If a rule container is no longer valid for an object, relationship 509 must be delimited.

- **Non-academic callup points**: they are used to directly assign rule containers (RC) to applications, such as admission. Rule containers related to non-academic callup points are valid for all objects of the academic structure.

- **User-defined callup points**: customers can define additional callup points in the customer namespace and build into BAdIs or customer programs VSR checks

Note: Both academic and non-academic callup points are predefined by SAP!

The relevant SLCM application processes the assigned rule containers when the callup point occurs.

One typical relationship of rule containers is the following: “is used by”, relevant for the following objects:
• Organizational Unit (O) -> Rule containers assigned to organizational units can be used for any academic callup point!

• Program of Study (SC)

• Study Module (SM)

• Module Group (CG)

• Event Package (SE) -> Rule containers assigned to event packages will only be evaluated during module booking callup points!

Rule containers have infotype objects (1000), relationships (1001), description (1002), and others. You create rule containers with transaction PIQRC or in the SAP menu Student Lifecycle Management -> Academic Structure (Curriculum) -> Rules -> Edit Rule Container.

1) Attach rule containers to objects of the academic structure by creating relationships and define the callup points for rule containers as additional relationship data.
   • You can use the program catalog to attach the rule container to academic objects.

2) Attach rule containers directly to callup points.
   • You do so in the IMG under Student Lifecycle Management Processes -> General Settings -> Rules -> Rule Containers -> Assign Rule Containers to Callup Points.

All rules within a rule container, which are
1) defined for a callup point and
2) attached to a process-relevant academic structure object
are checked when the callup point occurs
   • Example: Student registration for a new program => a check before saving takes place if registration rules (defined at program level) are fulfilled.

6.2.2.9. Assessment

Assessments can be assigned to a module if the assessment should be an exam for a course completion (module assessment) or they can be assigned to a program if the assessment process is used for graduation (program completion).

If the assessment is assigned to a program please note that each program of study (SC) has ONE assessment process! You would not have one assessment process for multiple programs of study!

But: You can have multiple assessment processes in the case of module assessments!

Configuration example for module assessment (e.g. exam):

1) Create an assessment (object CE) via the program catalog and attach the assessment to a module
2) Maintain exam profile
   • Exam profile is maintained on infotype „assessment data”
   • Mark the exam profile as „default” (then it is defaulted for the scheduling)
3) Schedule assessment
   • Use transaction „edit assessment”

For module completion assessment access to room reservation functionality is available.
Assessment Process Overview for module and program completion

Assessments within the audit process
- The audit functionality in Student Lifecycle Management is a tool which supports the auditing of requirements a student has to fulfil for a certain process.
- For different processes different audit types are required. Three such audit types are delivered:
- Degree Audits
- Stage Audits
- Admission Audit.

- In addition the audit functionality is integrated to the assessment processes. SAP delivers specific assessment processes with audits for program completion (graduation) and stage completion. In addition, admission assessment processes with admission audits are delivered.

- You can define additional audit types for specific processes. For customer defined audit types you can define additional parameters.

**Audit Types**

An audit type refers to the process you want to support with an audit. Along with the audit type you define the parameters required for this audit type. You can also define the evaluation path starting from a study object (CS) for the default main requirement catalog. The main requirement catalog is required to derive the basic pattern of a requirement profile.

<table>
<thead>
<tr>
<th>Audit Type</th>
<th>Description</th>
<th>Evaluation Path</th>
<th>Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>Degree Audit</td>
<td>SC-O</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>Stage Audit</td>
<td>SC-O</td>
<td>Stage</td>
</tr>
<tr>
<td>4000</td>
<td>Admission Audit</td>
<td>SC-O</td>
<td></td>
</tr>
</tbody>
</table>

**Parameter Audits**

For the requirement derivation one needs the program of study, the specializations and a catalog version. Some audit types need additional parameters. For example, the Stage Audit requires the „stage“ as parameter.

**Summary Scenario for setting up long term academic objects:**

After setting up the organizational structure, use the Program Catalog to:

- Define the module groups within the program of study (Relationship 500 "consists of").
- Assign modules to the associated module groups within the program of study as part of the program content (Relationship 500 "consists of").
- Assign modules directly to the program of study as part of the program content (relationship 500 "consists of").
- Define the internal qualifications (e.g. Degrees/Certificates) to be awarded upon completion of the program of study (relationship 528 "imparts").
- Define the internal qualifications which are prerequisite for the program of study (e.g., the undergraduate degree required for a postgraduate program) (relationship 529 "is prerequisite of").
- Optional step: assign a rule container to the program of study (relationship 509 "is used by").
6.2.2.10. Business Events and Event Packages

Business Events:
- take place on specific dates
- require Resources
- object validity is influenced by a schedule
- have capacity limits
- take place at specific locations

Event packages bundle events and can be part of a module or a Business Event Type. The event package can either be a reusable, long-lived object or a short-lived object which is used only for one Event Planning session. Example: a student must attend the “Lectures in Exp. Physics” and “Exercise in Exp. Physics” in order to fulfill the requirements of the module. Lecture and exercise are represented by two different event objects.

- Event Packages are generally assigned to modules and inherit the sessions of offerings specified at the module level.
- Through event packages you can do the following:
  - Book several academic offerings at once instead of having to book each separately.
  - Offer academic offerings (e.g. tutorials, exams) for different learning objectives or instructors
  - Set tuition fees for the offerings listed under modules. They therefore make it possible to define different fees for different event packages.
  - Define booking rules in rule containers per package.
  - Define the campus at which an event package is held.
  - Maintain an academic calendar for the event package.
  - Maintain capacities per event package.
  - Maintain a pattern per event package.

Event planning in SLCM offers BAdIs for defining customer specific requirements, e.g.

- Setting the event package name and short text as default when creating an event package. The event package name is derived from the module name.
- Set the event name, short text and capacities as default from the event type information.
- Validate the classroom hours with the contact hours. The validation also considers the credit hours from the course data.

You implement the BAdIs in Customizing for Student Lifecycle Management, under Master Data in Student Lifecycle Management -> Academic Structure -> Event Planning -> Business Add-Ins (BAdIs).

A Note on Room search

A web-based user interface is available for searching for rooms based on location, capacity, equipment, and availability. Included is a web-based view of room details with a Weekly Calendar view of room availability and the contact person for the course.

A Note on Capacity

Minimum / Optimum / Maximum capacity may be defined at different levels:
- Optimum and maximum capacity is taken into account primarily during the booking process. If the optimum or maximum capacity is exceeded for events, event packages or modules, the system will generate an information, warning or error message to the user.
- The minimum capacity of all objects has a minor impact and it is not evaluated by the system.

Capacity is checked during the following processes:
• **Modules (SM):** Evaluated during module booking. Triggers waitlisting.
• **Event Packages (SE):** Evaluated during module booking. Message if capacity exceeded.
• **Event Types (D):** Default for capacity at event level.
• **Events (E):** Evaluated during event booking. Message if capacity exceeded.
• **Rooms:** Taken into account during event booking.
• **User-Defined Validation:** Event Planning BADI is provided for user-defined validations (e.g. to check if room and event capacities are compatible).
• **Module Capacity Check:** Customizing switch allows to exclude module capacity check. This does not impact the module capacity but event packages and events. In case there exist many event packages for a single module you can now have simultaneous booking at the module on different event packages.

### A Note on Teaching Workload

Student Lifecycle Management offers an integrated teaching workload functionality consisting of:

**HCM:**
- Personal master data, processes
- Supports time recording for all types of activities, effort reporting, ...
- Obligations for teaching load are stored within the personnel/ position master data.

**SLCM:**
- Scheduling of events for courses using teachers which are managed in the Personal Master Data
- Tracking of activities which are related to teaching (Teaching Workload)

Workload of faculty members can be maintained in the HR infotype for positions (object type „P“) to track:

- **Resource planning** in teaching activities
  - Load (free resources, covering the Event offering, ...)
- **Controlling**
  - Performance / contractual obligations
  - Costs (cost of teaching activities / revenues)
- **Compensation**
  - Determination of the amount of money that has to be paid
  - Determination of overload for faculty members
- **Strategic planning**
  - Analysis of trends
  - Analysis of profitability

You keep the information about teaching obligations of a staff member on the position which you have created for a staff member within HCM. The Position – Object Type S – offers an (extendable, standard) infotype where you can enter the following information:

- Mandatory teaching hours – can be defaulted by certain attributes
- Reductions of standard teaching hours and reasons, e.g.: administrative tasks in addition to teaching

You maintain required customizing in the IMG for **SLCM > Master Data in Student Lifecycle Management > Academic Structure > Administration of Teaching Hours (HR Funds & Position Mgt)**

- Define default values for mandatory teaching hours
- Define reasons for reducing teaching hours for positions

Reasons for reduction of teaching hours may include (visible impact on compensation in Payroll / Invoice):

- Contractual / non-contractual reassigned times
  - Department chair
- Member of committees
  - Temporarily / permanent reduction
  - Individual agreements
  - Disability

Student Lifecycle Management offers the following attributes to describe the Teaching Workload after event packages (SE) and events (E) are created:

- **Units for measuring teaching load, e.g.**
  - Semester Hours
  - Preparation Units

- **Teaching Activity Groupings (Workload Types) with units, e.g.**
  - Teaching – Semester Hours
  - Preparation – Preparation Units

- **Teaching Activities, e.g.**
  - Prepare a course – belongs to preparation
  - Teach a class – belongs to teaching
  - Co-teach a class – belongs to teaching

- **Calculation Rules for Teaching Activities, e.g.**
  - “Teach a class” is counted per contact hour of an event
  - “Prepare a course” is counted per event type

- **Weighting Factors per category, e.g.**
  - Teaching a lecture counts with factor 1 per contact hour, while teaching an exercise counts for 50 percent.

Customizing Path: IMG for Student Lifecycle Management -> Master Data in Student Lifecycle Management > Academic Structure > Teaching Workload

### 7. Example Business Scenario

A University offers Undergraduate program “Economics, Politics and International Studies”. It consists of Majors and Minors with certain academic rules which students must fulfill to be granted their final degree.

To implement the described scenario you have to

1. build the academic structure and
2. design the requirement catalogs

#### 7.1.1. Academic & Assessment Rules

The Undergraduate degree involves three years of study and leads to a Bachelor of Science (BSc) or Bachelor of Arts (BA) degree. The first year consists of a foundation in all three disciplines. In the second and third year, students may specialize either in Politics and International Studies, whilst continuing to take Economics as minor subject, or in Economics with Politics and International Studies as Minor. Students take five equally-weighted modules in the first year, consisting of

- 1 core economics module (combining micro and macro)
- 1 quantitative module
- 2 core modules in politics, and
- 1 optional module from a list of University first year options.

Note: Students must pass all five first-year modules in order to proceed to their second year of study. Students who fail first-year modules may re-sit in September.
In all Economics courses the first year is a qualifying year so that the final degree classification is determined on the basis of performance in the second and third years. Performance in most second and third year modules in Economics is assessed partly by examination (80%) and partly by written coursework (20%).

**First Year**

Students take core modules totaling between 144 and 150 credits as follows:

- **core modules** worth 120 credits and
- **optional modules** worth at least 24 credits.

Some first-year modules are prerequisites for certain second- and third-year modules.

<table>
<thead>
<tr>
<th>Core modules</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC107    Economics 1</td>
<td>30</td>
</tr>
<tr>
<td>EC120    Quantitative Techniques</td>
<td>30</td>
</tr>
<tr>
<td>PO107    Introduction to Politics</td>
<td>30</td>
</tr>
<tr>
<td>PO131    World Politics</td>
<td>30</td>
</tr>
</tbody>
</table>

**Optional modules (up to 2 modules, in summary between 24 and 30 credits)**

<table>
<thead>
<tr>
<th>Optional modules</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC104 or EC112 The World Economy: History and Theory</td>
<td>30</td>
</tr>
<tr>
<td>or EC112 The Industrial Economy: Its Global Shift</td>
<td>15</td>
</tr>
<tr>
<td>EC132 The Industrial Economy: Strategy</td>
<td>15</td>
</tr>
<tr>
<td>EC119 Mathematics for Economists</td>
<td>15</td>
</tr>
<tr>
<td>EC133 Linear Algebra for Economists</td>
<td>15</td>
</tr>
</tbody>
</table>

**Second Year**

Candidates choose between an Economics Major (leading to BSc) and a Politics and International Studies Major (leading to BA). Candidates for Honors take modules totaling 120 credits. Candidates take a maximum of 30 credits of optional modules from outside Economics and Politics across years 2 and 3. E.g., candidates could take a 30-credit module from disciplines other than Economics or Politics in either year or a 15-credit such module in both years.

**ECONOMICS MAJOR**

Candidates take core modules worth 90 credits and optional modules worth 30 credits.

<table>
<thead>
<tr>
<th>Core modules</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC204    Economics 2</td>
<td>30</td>
</tr>
<tr>
<td>EC203 or EC226 Economic and Social Statistics</td>
<td>30</td>
</tr>
<tr>
<td>or Econometrics 1</td>
<td>30</td>
</tr>
<tr>
<td>PO201 or PO219 Political Theory from Hobbes</td>
<td>30</td>
</tr>
<tr>
<td>or Theories of International Relations</td>
<td>30</td>
</tr>
</tbody>
</table>
### Optional Module

<table>
<thead>
<tr>
<th>Module Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A second year module in Economics <strong>OR</strong> Any other approved 2nd-year option (Candidates may take a non-Economics or non-Politics 30 credit module in either their second or third-year of study, but not in both years).</td>
<td>30 or 2 x 15</td>
</tr>
<tr>
<td>A second-year module in Politics &amp; International Studies <strong>OR</strong></td>
<td>30 or 2 x 15</td>
</tr>
<tr>
<td>Any other approved second-year option</td>
<td>30 or 2 x 15</td>
</tr>
</tbody>
</table>

### POLITICS & INTERNATIONAL STUDIES MAJOR

Candidates take core modules worth 90 credits and optional modules worth 30 credits.

<table>
<thead>
<tr>
<th>Core modules</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC204 Economics 2</td>
<td>30</td>
</tr>
<tr>
<td>PO201 Political Theory from Hobbes</td>
<td>30</td>
</tr>
<tr>
<td>PO219 Theories of International Relations</td>
<td>30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Optional modules</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A second year module in Economics <strong>OR</strong></td>
<td>30 or 2 x 15</td>
</tr>
<tr>
<td>A second-year module in Politics &amp; International Studies <strong>OR</strong></td>
<td>30 or 2 x 15</td>
</tr>
<tr>
<td>Any other approved 2nd-year option. Candidates may take a non-Economics or non-Politics 30 credit module in their 2nd or 3rd-year of study, but not in both.</td>
<td>30 or 2 x 15</td>
</tr>
</tbody>
</table>

### Third Year

### ECONOMICS MAJOR

Candidates for Honors take modules totaling 120 credits, which comprises 30 credits of core modules and 90 credits of option modules. Within the 90 credits of optional modules, at least 60 credits should be contributed by third-year (300-coded) modules. Candidates may take 30 credits worth of non-Economics or non-Politics module in either their second or third-year of study, but not in both years.

<table>
<thead>
<tr>
<th>Core modules</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC304 The Making of Economic Policy</td>
<td>30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Optional Modules</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A third year module in Economics <strong>and</strong></td>
<td>30 or 2 x 15</td>
</tr>
<tr>
<td>A second or third year module in Economics (see rule above) <strong>and</strong></td>
<td>30 or 2 x 15</td>
</tr>
<tr>
<td>A third year module in Politics and International Studies <strong>or</strong></td>
<td>30 or 2 x 15</td>
</tr>
<tr>
<td>IB314 Business Studies II <strong>or</strong></td>
<td>30</td>
</tr>
</tbody>
</table>
### Politics & International Studies Major

Candidates for Honors take core modules worth 60 credits and optional modules worth 60 credits: 30 credits of the optional modules must be contributed by third-year modules. Candidates may take 30 credits worth of non-Politics or non-Economics modules in either of their second or third year, but not in both modules.

<table>
<thead>
<tr>
<th>Core Modules</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC304</td>
<td>The Making of Economic Policy</td>
</tr>
<tr>
<td>PO301</td>
<td>Issues in Political Theory or</td>
</tr>
<tr>
<td>PO333</td>
<td>Political, Economic and Legal Problems of European Integration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Optional Modules</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A third year module in Politics &amp; International Studies <strong>and</strong></td>
<td>30 or 2 x 15</td>
</tr>
<tr>
<td>A second or third year module in Economics (see rule above) <strong>or</strong></td>
<td>30 or 2 x 15</td>
</tr>
<tr>
<td>A third year module in Politics &amp; International Studies <strong>or</strong></td>
<td>30 or 2 x 15</td>
</tr>
<tr>
<td>IB314</td>
<td>Business Studies II <strong>or</strong></td>
</tr>
<tr>
<td>LA205</td>
<td>International Law <strong>or</strong></td>
</tr>
<tr>
<td>Any other approved second year option (see rule above)</td>
<td>30 or 2 x 15</td>
</tr>
</tbody>
</table>
7.1.3. Implementation Steps

7.1.3.1. Building the academic structure

a) **Program of Study**

Create a program of study to represent degree program ‘Economics, Politics and International Studies’.
Create a module group variant to represent ‘Majors’ and assign it to the program data infotype in the field “Module Group Variant”.

<table>
<thead>
<tr>
<th>Abbreviation/Name</th>
<th>BA EC &amp; POL</th>
<th>BA Economics, Politics &amp; Intl. Studies</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Program Data</th>
<th>Capacity</th>
<th>Fee Calculation Data</th>
<th>Disciplines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Type</td>
<td>Undergraduate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Variant</td>
<td>Semester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Module Group Variant</td>
<td>1 MAJOR</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Full/Part-Time

- [ ] Full Time
- [x] Part Time
- [ ] Full/Part-Time

- Program Duration: 0
- Max. Prog. Duration: 0

b) **Qualifications**

Create two qualifications to represent the degrees of the program of study
- BA - Major in Politics & International Studies
- BSc - Major in Economics

In order to calculate the final overall program grade, a “Grade Calculation Method” must be maintained on the tab “Qualification Data”. To access the customizing settings, use IMG path: SLCM>Master Data in SLCM>Qualifications>Grade Calculation Methods

<table>
<thead>
<tr>
<th>Internal Qualification</th>
<th>80034886</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Validity</td>
<td>01.01.1900 to 31.12.9999</td>
<td></td>
</tr>
</tbody>
</table>

Object

<table>
<thead>
<tr>
<th>Abbreviation/Name</th>
<th>BA POL</th>
<th>BA - Major in Politics &amp; Intl Studies</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Qualification Data</th>
<th>Evaluation</th>
<th>Disciplines</th>
<th>Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification Group</td>
<td>DEGR University Degrees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree Type</td>
<td>BACH Bachelor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree Level</td>
<td>Undergraduate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade Calculation Method</td>
<td>ASSE Assessment Process</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
c) **Module Groups**

Create the following module groups:

<table>
<thead>
<tr>
<th>Module Groups</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation Year</td>
<td>Group modules belonging to the first year of the program</td>
</tr>
<tr>
<td>Foundation Core &amp; Optional</td>
<td>(Logical) Group foundation modules</td>
</tr>
<tr>
<td>Major in Economics</td>
<td>Represents a specialization in subject ‘Economics’</td>
</tr>
<tr>
<td>Core &amp; Optional Modules-Economics</td>
<td>Represent core modules for Major ‘Economics’</td>
</tr>
<tr>
<td>Major in Politics</td>
<td>Represents a specialization in subject ‘Politics’</td>
</tr>
<tr>
<td>Core &amp; Optional Modules-Politics</td>
<td>Represent core modules for Major ‘Politics’</td>
</tr>
</tbody>
</table>

**Step 1: Create Module Group Types.**

**IMG: SLCM>Master Data in SLCM>Academic Structure>Module Groups>Set Up Module Group Categories**

- To customize categories to be used as specializations follow **Steps 1 to 4**
- To customize categories to be used as organization groupings use **Step 1**
Step 2: Set Up Module Group Variants

**IMG:** SLCM > Master Data in SLCM > Academic Structure > Module Groups > Set Up Module Group Categories

<table>
<thead>
<tr>
<th>Module Group Variant for Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
</tbody>
</table>

Create an entry for a Major to allow students to select either an ‘Economics’ or ‘Politics’ as Major during program registration.

Step 3: Set Up Module Group Variant/Category Combinations

**IMG:** SLCM > Master Data in SLCM > Academic Structure > Module Groups > Set Up Module Group Categories

<table>
<thead>
<tr>
<th>Module Group Variant/Category Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>ModGrpVar</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
</tbody>
</table>

Assign the variant to the group type specified as Major in **Step 1**.

Step 4: Assign Module Group Categories to Specialization

**IMG:** SLCM > Master Data in SLCM > Academic Structure > Module Groups > Set Up Module Group Categories

<table>
<thead>
<tr>
<th>Assignmn. of External Module Group Categories to Internal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialization</td>
</tr>
<tr>
<td>Minor</td>
</tr>
<tr>
<td>Major</td>
</tr>
</tbody>
</table>

Step 5: Creating the Module Groups

Create the module groups specified in **Step 4** above and maintain the module group data infotype according to the customizing settings created in the previous steps.

For example, assign the category “Foundation Year” to the module group representing this group of modules. Repeat this step for all the other module groups.
Step 6: Assign module characteristics

The program of study has two types of modules: ‘Core’ and ‘Optional’. Use the flag “Core Item” on the relationship between the module group and module to assign the ‘core modules’ characteristic.

The flag ‘core item’ will be used in Degree Audit to define some of the academic rules. They are used within the filter to select the core modules or to define a condition all core modules need to be completed.
### Step 7: Result Overall Program Structure

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA EC &amp; POL</td>
<td>BA Economics, Politics &amp; Intl. Studies</td>
</tr>
<tr>
<td>Imports</td>
<td></td>
</tr>
<tr>
<td>BA POL</td>
<td>BA - Major in Politics &amp; Intl Studies</td>
</tr>
<tr>
<td>BS Econ</td>
<td>BS - Major in Economics</td>
</tr>
<tr>
<td>FOUND YR</td>
<td>Foundation Year</td>
</tr>
<tr>
<td>FOUND CORE</td>
<td>Foundation Core Modules</td>
</tr>
<tr>
<td>EC107</td>
<td>SM 5003487 Economic 1</td>
</tr>
<tr>
<td>EC120</td>
<td>SM 5003486 Quantitative Techniques</td>
</tr>
<tr>
<td>P0107</td>
<td>SM 5003489 Introduction to Politics</td>
</tr>
<tr>
<td>P0131</td>
<td>SM 5003480 World Politics</td>
</tr>
<tr>
<td>FOUND OPT</td>
<td>Foundation Optional Modules</td>
</tr>
<tr>
<td>EC104</td>
<td>SM 5003491 The World Economy: History and Theory</td>
</tr>
<tr>
<td>MAJ ECON</td>
<td>Major in Economics</td>
</tr>
<tr>
<td>ECON CORE</td>
<td>ECON Core</td>
</tr>
<tr>
<td>EC203</td>
<td>SM 5003498 Economic and Social Statistics</td>
</tr>
<tr>
<td>EC204</td>
<td>SM 5003497 Econometrics 2</td>
</tr>
<tr>
<td>EC226</td>
<td>SM 5003499 Marketing Analysis</td>
</tr>
<tr>
<td>P0201</td>
<td>SM 5003490 Political Theory from Hobbes</td>
</tr>
<tr>
<td>P0219</td>
<td>SM 5003491 Theories of International Relations</td>
</tr>
<tr>
<td>ECON COR Y2</td>
<td>Economics Core Year Two</td>
</tr>
<tr>
<td>ECON COR Y3</td>
<td>Economics Core Year Three</td>
</tr>
<tr>
<td>EC304</td>
<td>SM 5003496 The Making of Economic Policy</td>
</tr>
<tr>
<td>MAJ POL</td>
<td>Major in Politics &amp; Internat. Studies</td>
</tr>
<tr>
<td>POL CORE</td>
<td>Pol &amp; Int. Studies Major Core Modules</td>
</tr>
<tr>
<td>EC204</td>
<td>SM 5003487 Economics 2</td>
</tr>
<tr>
<td>P0201</td>
<td>SM 5003490 Political Theory from Hobbes</td>
</tr>
<tr>
<td>P0219</td>
<td>SM 5003491 Theories of International Relations</td>
</tr>
<tr>
<td>POL CORE Y3</td>
<td>Pol &amp; Int. Studies Major Core Modules Y3</td>
</tr>
<tr>
<td>EC304</td>
<td>SM 5003496 The Making of Economic Policy</td>
</tr>
<tr>
<td>P0301</td>
<td>SM 5003492 Issues in Political Theory</td>
</tr>
<tr>
<td>P0333</td>
<td>SM 5003493 Political, Econ &amp; Legal Prob of EU Intern</td>
</tr>
<tr>
<td>POL OPT</td>
<td>Pol &amp; Int. Studies Major Core Modules Y3</td>
</tr>
<tr>
<td>EC215</td>
<td>SM 5003494 International Economics</td>
</tr>
<tr>
<td>P0215</td>
<td>SM 5003490 Political of the USA</td>
</tr>
<tr>
<td>P0217</td>
<td>SM 5003492 Business of the UK</td>
</tr>
<tr>
<td>P0333</td>
<td>SM 5003491 Political, Econ &amp; Legal Prob of EU Integr</td>
</tr>
<tr>
<td>POL OPT Y2</td>
<td>Pol &amp; Int. Studies Major Core Modules Y3</td>
</tr>
<tr>
<td>EC310</td>
<td>SM 5003494 International Economics Y2</td>
</tr>
<tr>
<td>P0310</td>
<td>SM 5003492 Issues in Political Theory Y2</td>
</tr>
<tr>
<td>P0333</td>
<td>SM 5003493 Political, Econ &amp; Legal Prob of EU Integr Y2</td>
</tr>
<tr>
<td>POL OPT Y3</td>
<td>Pol &amp; Int. Studies Major Core Modules Y3</td>
</tr>
<tr>
<td>EC310</td>
<td>SM 5003494 International Economics Y3</td>
</tr>
<tr>
<td>IB314</td>
<td>SM 5003490 Business Studies II</td>
</tr>
<tr>
<td>LA205</td>
<td>SM 5003491 International Law</td>
</tr>
<tr>
<td>P0333</td>
<td>SM 5003493 Political, Econ &amp; Legal Prob of EU Integr Y3</td>
</tr>
<tr>
<td>POL OPT Y3</td>
<td>Pol &amp; Int. Studies Major Core Modules Y3</td>
</tr>
<tr>
<td>EC310</td>
<td>SM 5003494 International Economics Y3</td>
</tr>
<tr>
<td>IB314</td>
<td>SM 5003490 Business Studies II</td>
</tr>
<tr>
<td>LA205</td>
<td>SM 5003491 International Law</td>
</tr>
<tr>
<td>P0333</td>
<td>SM 5003493 Political, Econ &amp; Legal Prob of EU Integr Y3</td>
</tr>
</tbody>
</table>
8. Academic structure FAQ

8.1. Solution Implementation

Sequence of implementing different components

Q: Is it mandatory for HCM to be implemented before implementing SLCM?

A: SLCM and HCM can be implemented in the same enterprise system. They share the same organizational structure and SLCM can use the resources of HCM (Training and Event Management). A full HCM implementation is not a prerequisite to run SLCM. They can run both in parallel but the shared customizing and data between both must be considered. Most SLCM customers start from an existing HCM system.

8.2. Infotypes

List of available Infotypes

Q: Where can I find information on available infotypes or create new ones?

A: Transaction PPCI lists all infotypes and allows for creating new ones. You can use report RHIQ_HROBJINFO in transaction SE 38 -> F8 to display all Infotypes for an object type.

Other useful reports can be found in the SAP Menu at Human Resources -> Organizational Management -> Info System -> General and Tools (e.g. RE_RHDESC10 – Display Infotypes)

Enhancing existing Infotypes

Q: SAP does not recommend to enhance new fields into existing infotypes. Is it possible to add new fields to existing standard delivered infotypes or is this considered as modification, e.g. screen modifications?

A: This is possible but it is considered as modification (not only screen modifications, but likely also coding modifications are necessary). It is not recommended. Rather a new infotype should be created. The reason for not recommending this approach is that it is difficult to populate this fields via the standard tools (BAPI's) for data transfer, self-services etc. If only few fields are missing this approach may still be of advantage.

Changing key dates of objects

Q: How can I change the key date of objects in the academic structure?

A: To correct the key date of objects (e.g. SC) use report RHBEGDA0 / TA_RE_RHBEGDA0. Select the relevant object type and enter in the lower part the previous and the new date.

Other useful reports to be used in TA 38 include:

- RHBEGDA0 Set new start date for object
- RHGRENZ1 Set new end date for objects
- RHGRENZ4 Set new end date for objects incl. Infotypes
- RHINFT00 Maintain Infotypes
- RHINFAW0 Infotype Reporting
- RHMOVE30 Transport of HR Objects
- RHRHDL00 Deletion of objects
8.3. Academic Structure Objects

Assignment of top organization and company codes

Q: What needs to be considered when assigning a top organizational unit and company codes?

A: The top org or HIORG is used for two purposes:

1) To define the academic session dates for processes such as fee calculation.
2) To set the default company code that is used for Student Account creation.

There can be only one top org. Other existing org units do not have to 'roll up' to it in the organization structure. It can exist on its own. Usually the system is set up with a single company code and multiple business areas instead of defining multiple company codes. If you plan to use multiple company codes use Badi HRPIQ00_ST_ACCOUNT to set the company code for different students when accounts are created.

Error messages related to a Default Company code

Q: We get an error message which indicates that no company code is maintained for organizational unit 00000000 in plan version 1. We don't have an org unit 00000000. Do we have to add it to the org. structure?

A: When customizing the academic structure you need to define a top organizational unit (IMG: SLCM - SLCM Master Data - Academic Structure - Organizational Structure - Define Top Organizational Unit). Additionally you should execute the report "Check Contract Account Settings" in the IMG -> Student Lifecycle Management-> Master Data in Student Lifecycle Management-> Student Contract Accounts (Student Accounts) -> Check Contract Account Settings to make sure the settings are complete.

Default company code

Q: I receive error message “The company code group x specified in the contract account does not contain company code PUS1”

A: Maintain PUS1 as default company code in the IMG -> Student Lifecycle Management -> Master Data in Student Lifecycle Management -> Student Contract Accounts (Student Accounts) -> Basic Settings for Student Contract Accounts-> Define Standard Company Code Group for Student Accounts

Derivation of student's organizational unit

Q: How does the derivation of a student's Org ID work?

A: The student's Org ID is derived dynamically. Changes performed at the academic structure affect all students. The SAP System determines the derived organizational unit by evaluating the student's registration data (registered program or selected module groups). The derived organizational unit is usually the organizational unit that offers the main program or module group.

You do not have to explicitly assign the student to an organizational unit. If you do not assign an organizational unit directly to the student, the system uses the derived organizational unit as the principal organizational unit of the student.

You assign a student directly to an organizational unit by explicitly defining the principal organizational unit of the student. The system administrator can adapt the algorithm for deriving the organizational unit to customer specific requirements in Customizing for Student Lifecycle Management (BAPl: Determine/Derive Student's Organizational Unit).

Derivation of principal organizational unit

Q: Where is the principal organizational unit stored? The data seems to be not maintained in the respective IT1705 but in another structure, PIQORG.
A: The documentation of function module HRIQ_STUDENT_ORG_GET describes the derivation logic. The most straightforward way is to use relationship 502 between the objects ST and Ö to assign the org unit directly to the student. For more complex scenarios look at the IMG: SLCM - SLCM Master Data - Academic Structure - Module Groups-> Set Up Module Group Variants and the field 'Derivation Rule for Org. Unit'.

HRIQ_STUDENT_ORG_GET

_________________________________________________

Determine Principal Organizational Unit for Student

Functionality

You can use this function module to determine the principal organizational unit(s) for a student in a given time interval.

The function module derives this information in several steps:

1. First, it reads the direct relationships (502) between the student and an organizational unit in a given time period.
2. If one or more direct relationships exist, the function module:
   a) Writes this/these in an export table
   b) Determines the periods in which no direct relationship exists and derives the organizational unit for these periods.
   c) If the end date of the last organizational unit the function module derived is before the end date of the given time interval, the function module also derives the organizational unit for the period up to the given end date.
3. If no direct relationship exists, the function module derives the principal organizational units for the time interval that was completely transferred.

Reusability of programs of study

Q: We have the same program offered by the separate campuses within one university. Do we have to create two programs of study?

A: A program of study can be offered by more than one org. unit. What is referred to as 'campus' in SLCM is object type F 'Location' which can be linked to events or event packages but not to programs of study directly. Note: SAP SLCM allows students to be registered to more than one program (multiple registrations).

Multiple Campus Environment

Business Scenario:

- One campus
- Two different locations = Campus 1 and Campus 2. Both campuses belong to the same institute.
- Campus 1 & Campus 2 may or may not have the same academic calendar.
- Campus 1 & Campus 2 must have 2 admissions / registration periods per academic year.
- Campus 1 & Campus 2 may offer same or different courses.
- Students from Campus 1 should have the flexibility to attend courses offered at Campus 2 if the same offering is not available in Campus 1. In such a case, the final transcript should be generated by Campus 1.

Solution:

a. One top organizational unit 'university'
b. Two lower level organizational units 'campuses'). Create two different F objects (locations) to relate (A003) the campuses to locations.
c/d. One academic calendar is sufficient if ONLY the registration periods are different. This calendar must be assigned to the highest org unit.

e/f Programs of study, module groups and modules are offered by the campuses under the related organizational unit

Excluding programs of study which are not valid anymore in the structure search

Delimiting programs of study is very critical because it affects relationships, especially to CS. SC should only be delimited if all study segments which are related to it were completed even if this is difficult to control. A safe approach is to cut only the relationships to the organizational unit if it is ensured that nobody is studying in this program of study anymore. Thereby outdated programs of study will not be shown in structure search anymore. There should be an addition available in the description indicating that this program of study is no longer valid.

Locking problems while creating objects in the academic structure

Q: When creating objects in the academic structure, locking problems occur. This is the case if several users create relationships to the same objects at the same time.

A: Note 745860 describes a modification to deal with this. Locking problems occur mainly when objects are created during the initial phase (in insert mode RHV6).

In standard objects R (resource types) are locked when they are assigned to event types. That is standard behaviour for all objects. When a relationship between two objects is created, both objects are locked. This problem comes up when many users create a module for an organizational unit in the module catalogue.

For creation of objects SLCM uses the tool RHV6 and for changing objects the PP01 transaction.

If you change an object (a relationship) in PP01, both objects will be locked. Users are blocking each other since they use also the change mode (PP01). In that case nothing can be done. Also the above modification proposal will not work.

Making academic structure data available for other systems

Q: How can we provide course information to other systems, e.g. the student portal and eLearning-Systems?

A: A report is available which extracts the academic structure including Module and Event Offerings in XML. SLCM Menue - Academic Structure - External Academic Structures -> PIQ_XML00 - Generate XML Files

Assigning costs/revenues to courses

Q: Is it possible to assign costs/revenue to courses (SM's)?

A: The distribution of revenues deriving from course fees can be done on SM level. You can assign a cost centre on which revenue is booked to a module. In SLCM standard delivery there is one example case which is based on IT 1018 (cost or revenue distribution). Costs can be defined on the level of event packages. Here also cost centres can be assigned.

Assigning CI objects as thesis

Q: How can we set up an appropriate object in the academic structure for thesis work?

A: When you have a student registering for a thesis project, an internship, or other individual study topic, it is generally not necessary and not recommended to set up any events or event types at all. Just book the student to the module and create the individual work. This approach also addresses the case where you have a course that has both a regular classroom component and an individual work component. E.g., you may have a course that has a regularly scheduled lecture (event) which needs its own event type of category
'Lecture'. However, the same course may also require each student to complete a special research project with an individual topic, which is possible as long as the category of the study module still allows for CI.

8.4. Curriculum Planning

Specific characteristics of events in SLCM

Q: Which are the main characteristics of event planning in SLCM?

A: The event type in SLCM defines the template for the event. This includes the definition of the resource requirements. Resource requirements depend on the category and delivery mode of the event. For different categories and delivery mode you need to use different event types. The event then "inherits" the attribute from the event type.

There are two use cases as examples: A course is offered with a classroom instruction and a lab. A student needs to attend both to complete the course. In this case you have two Ds - one for the classroom and one for the lab - linked to the SM. In event planning you create for each D one or several E’s and then combine one classroom E with one lab E to an event package (SE). You are not allowed to combine events of the same type to one SE.

The second use case is where you offer a course either with a classroom or a lab. Again you create two D’s as above, but attach only one event of one type to an event package.

In most cases you won't need for each course all types of events since you will not for all of them have the option to deliver them in different categories. Event types for an SM represent the selection of categories and delivery modes available to offer the course. In SLX event planning the creation of event types allows to add additional types if needed. You don’t have to set up all possible variants at the beginning.

Planning of several events for the same module

Q: Can I create several events on the same day and time for one module?

A: You can create events on the same day and time for a single module as long as they do not overlap resources (room, professor).

Cancellation of an event package/event

Q: What impact does the cancellation of an event package/event have?

A: 1) The function "Cancel Business Event Package" will remove the session of offering for the actual selected year and period and delete related business events, if they are not used within other business event packages. If the business event package has already been booked, the cancellation will be rejected. After executing the save function the business event package will be removed from the database.

2) The function "Cancel Business Event" will cancel the business event. Existing bookings will be cancelled and prebooked to the business event type and assigned resources will be unassigned. The business event will not be deleted - it will only be marked as cancelled (Infotype business event info 1026).

The function for deleting business event will only be executed if the business event has not been booked. After executing the save function the business event will be removed from the database.

Creating events without meeting times

Q: How can I create a class that has a start date, end date, and instructor but no meeting times?

A: You can create an event (EL) without a schedule and set the from - to date as start and end date. This would be used if you add later a schedule to the event. For such a time independent event you can't add an instructor in standard. For a correspondence/ distance learning course you can also use individual work (SM with a category for individual work). This is intended not just for thesis etc. but also for correspondence
courses. Multiple students can use one individual work. You can also still book SE’s and E’s. Once resources are assigned and a schedule is created for a time independent event EL, the event is time dependent (E).

Building a report for setting the flag for offered sessions in a study module
1. Copy table (HRP1739) to Excel
2. Add the new/extra sessions of offering in the Excel
3. Copy the Excel back to the table.

Use transaction UASE16N. With this transaction you can use &sap_edit again. Alternatively use se16n.

Limiting view on academic offerings to specific student groups

In the module search function, customers can control via BadI the values that appear in the search criteria drop-down boxes. For different students different search values can be displayed (e.g. undergraduate won’t see graduate academic levels). The Program Context (Program of Study, Program Type) can be controlled via BadI HRPIQ00MBSS_SEARCH_CRIT_FILTER.

Searching for course offerings based on certain search criteria

Function module HRIQ_RFC_OFFERS_GET_LIST allows the search for module offerings via filter parameters. Users can search module offerings filtered by:

- Instructor
- Location
- Room
- Date
- Credits

Manual for the usage of program HRIQ_COPY_ROLL_FORWARD, transaction PIQCOPY

You use the function for copying event offerings to create academic events for a specific academic period (session). This function simplifies your event planning tasks.

Prerequisites:
- Existing session serves as “template” for a later academic period (eligible if the new term is similar).
- Maintain target session in academic calendar first.
- Check if resources (rooms, instructors are available)

To copy the event offerings of an academic session, proceed as follows:
1. Choose an evaluation path and a root object.

The system uses the evaluation path to find modules. Then it determines the event offerings (event packages and academic events) for the modules.

Example:

<table>
<thead>
<tr>
<th>Object Type</th>
<th>Root Object</th>
<th>Evaluation Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Unit</td>
<td>Teaching Centre</td>
<td>PIQOF_O</td>
</tr>
</tbody>
</table>

2. Choose the processing type Copy Business Events (flag use templates for event offerings deactivated)
3. If you want the system to check if it already used event offerings to copy from, set the indicator “Check If Already Copied”
4. Specify if you want to copy planned or firmly booked (active) business events.
5. Choose an academic year and academic session (in the Copy From and Copy To frames).
6. To further restrict the business event selection, set the appropriate indicator in the Copy Business Events with Following Attributes frame.

It is recommended to set these flags:
• **Take Sess. Pattern into Account:** If you set this indicator, the system processes only those modules and event packages which are offered in the selected academic year and academic session.
• **Copy Locked Business Events.** A Business Event will be copied even in the case it is currently used.

7. Set the indicator for test run and parallel processing, if required. Optional: Create a variant to reuse your settings.

8. Choose the pushbutton with the quick info text *Execute*.

The new academic period contains the event offerings you selected from the given academic period. The system automatically creates the business events you create with this program as business events with the schedule category *regular schedule*. These business events have a schedule and resource description (schedule elements).

8.5. Academic Calendar

**Multicampus institution**

There is a country institution with an academic calendar which has been in place for some time. Historical bookings exist. In the country there are two teaching centres (TC A and TC B). Both inherit the calendar from the higher level. Countries and TCs are Org Units in the academic structure.

The calendar is assigned at the higher level from 01.01.1980 - 31.12.9999.

From January 2012 on, TC A wishes to remain on this calendar.

TC B wants to use a different Calendar going forward starting with relationships from 01.09.2011 - 31.12.9999, and keep the old calendar historically.

**Solution approach:**

The validity of the new calendar used for TC B can also be set from 01.01.1990 - 31.12.9999. It is sufficient to maintain timelimits in the new calendar dates only for years and sessions from 01.09.2011 onwards.

The system will behave as follows: if it has to derive the dates for session X year 2010, it will first go to the calendar linked directly with TC B and will not find any timelimits for 2010/X there. From there it will search higher in the hierarchy and will get to the country calendar. If the system searches for session X in year 2012, it will again go first to the calendar attached TC B directly, will find the date and will not search further.

**Deletion of Academic Calendar**

Q: How can we delete the academic calendar which is used in the production system?

A: An academic calendar is an object of object type CA and as such it can be deleted using transaction PP01 (as any other PD object like org unit, etc). Note that a deleted object will disappear from the database together with all its Infotypes and relationships to other objects. There is no 'undo' function for this.

**Reading academic calendar data**

Q: Is there a RFC which allows other systems to read the academic calendar?

A: RFC HRIQ_READ_TIMELIMITS_CA provides dates for academic periods without regard to a specific context (i.e. if for module booking other periods are relevant than for registration).

HRIQ_ACAD_DEFAULT_CA_GET -> Reads Top Calendar

HRIQ_ACAD_READ_TIMELIMITS -> Reads data from source/top calendar

If HRIQ_ACAD_READ_TIMELIMITS is called without start object it will go to the top org unit automatically.

RFC HRIQ_CAL_INSERT_TIMELIMITS_RFC maintains/writes new time limits into an existing calendar. Together with the objects that belong to it, it can be used as template for writing reports that are used for generating time limits. It's not possible to change or delete timelimits with this function module, only new lines are inserted in infotype 1750.

**Academic event requires two rooms**

Q: Can I assign several locations to an event (like I can do with teaching personnel)?

A: It is not possible to book to rooms for the same time. You will need to set up two business events (E).
Related Content

SCN Higher Education & Research Knowledge Center.

Student Lifecycle Management documentation BS7 (EHP 4)

IHE102 SAP Student Lifecycle Management course.