

DOQUP SOFTWARE – Software for the on-line documentation
for the Quality Assurance of Study Programmes in Partner
Countries

DOQUP SOFTWARE USER GUIDE

-

Final

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Sommario

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Approvato da			
Distribuito a			

1. AIM

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The document contains the user guide of DOQUP SOFTWARE – Software for the on-line documentation for the quality assurance of study programmes in partner countries.

DOQUP SOFTWARE is a web application accessible through a web browser at the address doqup.cineca.it.

The software is available to both public and registered users:

- public users have only access to the documentation about the study programmes of the selected University;
- registered users, identified through Username and Password, can author the documentation.

2. BASIC FEATURES

This section describes the basic functionalities of the software for the documentation for the quality assurance of study programmes.

2.1 COUNTRIES LIST

The first page of the system is a public page that shows the list of the partner countries (the page is shown if the partner countries are more than one):

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes

Country

Azerbaijan	Universities
Kazakhstan	Universities
Kyrgyzstan	Universities
Tajikistan	Universities

When the user presses the “Universities” button, the system navigates to the Universities page.

2.2 UNIVERSITIES LIST

This public page shows the list of the Universities of the selected partner country:

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes

Short description	Long description	URL	
First University	University one ...	www.one.it	Study Programmes
Second University	<u>University two ...</u>	www.two.it	Study Programmes
Third University	University three ...	www.three.it	Study Programmes

When the user presses the “Study Programmes” button, the system navigates to the Study Programmes page.

2.3 LANGUAGE SELECTION

The system proposes the default language associated to the selected University (English or Russian). The user can change the proposed default language.

When the user changes the language, the system shows the translations in the selected language of:

- all the labels of the page fields;
- all the descriptions of the data displayed by the pages of the application.

2.4 STUDY PROGRAMME SELECTION

When the public user selects the University of interest choosing from the list of the Universities and presses the button “Study Programmes”; the system navigates to the Study programmes list page.

2.5 LOGIN

This section is reserved to registered users in order to author the documentation. Registered users are required to type their Username and Password.

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes		Login
Username	John Smith	
Password	*****	
University	First University	

After the login, the system navigates to the menu of the application.
 If the users has the "ROLE_ADMIN" role, the menu contains the following functions:

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes		Logout
Kion I University		
Universities		
Users		
Didactic Structures		
Study Programmes		

2.6 UNIVERSITIES

This function is available only to registered users with "ROLE_ADMIN" role for the introduction and updating of the following information on the selected University:

- University code;
- University short description;
- University long description;
- University URL address;
- University default language.

2.7 USERS

This function is available only to registered users with "ROLE_ADMIN" role for the definition and management of the application users of the selected University.

The ROLE_ADMIN user can insert new users, remove users or update the following user information:

- user name;
- user password;
- user role: ROLE_ADMIN or ROLE_USER.

2.8 DIDACTIC STRUCTURES

This function is available only to registered users with "ROLE_ADMIN" role for the definition and management of the didactic structure of the selected University (e.g. Department) responsible of the study programme

The ROLE_ADMIN user can insert new didactic structures, delete didactic structures (only if not related to a study programme) or update the following information on the didactic structure:

- didactic structure code,
- didactic structure short description,
- didactic structure long description.

2.9 DOCUMENTATION FOR THE QUALITY ASSURANCE OF STUDY PROGRAMMES

The function is available to public and registered users for the visualization and authoring of the documentation for the quality assurance of study programmes.

Public users can only see the information on the study programmes of the selected University.

Registered users (e.g. the reference teacher of a study programme) can author the documentation for the quality assurance of the study programmes.

2.9.1 STUDY PROGRAMMES LIST

After the user selects the academic year, the system shows the list of the study programmes offered that year by the selected University, split per study programme typology (graduate and post graduate study programmes):

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes		
Kion University	Language English	Logout
Academic Year	2013/2014	
Undergraduate Study Programmes		
A001 - Information Engineering A002 - Electrical Engineering and Computer Science A003 - Materials Science and Engineering A004 - Mechanical Engineering A005 - Nuclear Science and Engineering		
Graduate Study Programmes		
B001 - Aeronautics and Astronautics B002 - Biological Engineering B003 - Chemical Engineering B004 - Civil and Environmental Engineering		

The toolbar contains the following buttons:

- **ADD:** the button allows to create a new study programme;
- **EDIT:** the button allows to modify the information on a study programme;
- **COPY:** the button allows to copy a study programme;
- **DELETE:** the button allows to delete a study programme;
- **INFO:** the button allows to view the user and the date of creation and of updating of a study programme;
- **RELOAD:** the button allows to re-load the study programme list, canceling any modification not still saved;
- **SAVE:** the button allows to save the modification made to a study programme.

When the user selects a study programme, the system shows its general information page.

2.9.2 GENERAL INFORMATION ON THE STUDY PROGRAMME (PRESENTATION)

The information and data for the quality assurance of the study programme are collected into folders. The first folder contains general information about the study programme.

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes		Kion University	Language English	Logout
A001 - Information Engineering				
0 – GENERAL ENTRY				
Didactic Structure	Department of Electronics			
Typology	Bachelor	Duration	Three Years	
Qualification				
Cycle/Level				
Type of degree and length				
Institution(s)				

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes

Kion University

Language English

Logout

A001 - Information Engineering

0 – GENERAL ENTRY

Accreditation Organisation(s) and Period of Reference

Purpose

Discipline(s) / Subject area(s)

General / Specialist Focus

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes	
Kion University	Language English Logout
A001 - Information Engineering	
0 – GENERAL ENTRY	
Orientation <div style="border: 1px solid black; height: 70px; width: 100%;"></div>	
Teaching and Learning Approaches <div style="border: 1px solid black; height: 70px; width: 100%;"></div>	
Assessment Methods <div style="border: 1px solid black; height: 70px; width: 100%;"></div>	
Distinctive Features <div style="border: 1px solid black; height: 70px; width: 100%;"></div>	

The registered user can edit the information of every field of the page writing a text or specifying a URL or attaching one or more files:

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes	
Kion University	Language English Logout
A001 – Information Engineering	
Qualification	
The Qualification ...	
Link	www.kion.it
	File1.pdf File2.doc

2.9.3 A - NEEDS AND OBJECTIVES

The second folder contains the information about the identified educational needs and the established educational objectives.

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes	
Kion University	Language English Logout
A001 - Information Engineering	
<div style="border: 1px solid black; display: inline-block; padding: 5px 20px;">A - NEEDS AND OBJECTIVES</div>	
A1 - Educational needs of the labour market	
Organizations consulted and Methods and schedule of consultation	
Identified educational needs of the labour market	

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes

Kion University

Language English

Logout

A001 - Information Engineering

A - NEEDS AND OBJECTIVES

A2 - Educational objectives

Educational objectives

A3 - Learning outcomes

Learning outcomes

Comparison with learning outcomes of other study programmes of the same typology

2.9.4 B - EDUCATIONAL PROCESS

The folder contains the information about the educational process for the achievement of the established learning outcomes.

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes	
Kion University	Language English Logout
A001 - Information Engineering	
<div style="border: 1px solid black; display: inline-block; padding: 5px 20px;">B - EDUCATIONAL PROCESS</div>	
B1 - Admission qualification and requirements	
Admission to the study programme	
B2 - Design and planning of the educational process	
Curriculum	
Characteristics of the didactic units	
Characteristics of the graduation exam	
Suitability of the curriculum to the achievement of the learning outcomes	
Criteria for students' progression in their studies	
Calendar and timetable of didactic units and exams	

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes Kion University		Language English Logout
A001 - Information Engineering		
<div style="border: 1px solid black; display: inline-block; padding: 5px 20px;">B - EDUCATIONAL PROCESS</div>		
B3 - Realization of the educational process		
Correspondence with the designed and planned development	<div style="border: 1px solid black; height: 40px;"></div>	
Control of the assessment tests and of the evaluation of the students' learning	<div style="border: 1px solid black; height: 40px;"></div>	

2.9.5 C – RESOURCES

The folder contains the information and data about the available resources: teaching staff, facilities, financial resources, student support services and partnerships with businesses, research institutions and other Higher Education Institutions, for the achievement of the established educational objectives.

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes

Kion University

Language English

Logout

A001 - Information Engineering

C - RESOURCES

C1 – Teaching staff

Teaching staff

Teaching support staff

C2 – Facilities

Classrooms

Rooms for individual study

Laboratories

Libraries

Other resources and special initiatives

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes

Kion University

Language English

Logout

A001 - Information Engineering

C - RESOURCES

C3 - Financial resources (*optional*)

Needs of financial resources

Availability of financial resources

C4 - Student support services

Student administrative office

Orienteering service for students in entrance

Tutoring service

Service for carrying out training periods
outside University

Service for the students' international mobility

Job placement service

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes

Kion University

Language English

Logout

A001 - Information Engineering

C - RESOURCES

C5 - Partnerships

Partnerships for carrying out training periods
outside University

Partnerships for carrying out international
mobility periods

2.9.6 D – MONITORING AND RESULTS

The folder contains the results of the educational process and of the elaboration of the opinions of the interested parties on its quality.

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes	
Kion University	Language English Logout
A001 - Information Engineering	
<div style="border: 1px solid black; display: inline-block; padding: 5px 20px;">D – MONITORING AND RESULTS</div>	
D1 - Entrance students	
Assessment of the mastery of the admission requirements	
<div style="border: 1px solid black; height: 30px; width: 100%;"></div>	
D1.1_B - Results of the assessment of the mastery of the admission requirements	
Enrolments in the first course year	
<div style="border: 1px solid black; height: 30px; width: 100%;"></div>	
D1.2_B_1 - Bachelor students enrolled in the first course year	
D1.2_B_2 - Bachelor students enrolled in the first course year subdivided per geographical provenance	
D1.2_B_3 - Bachelor students enrolled in the first course year subdivided per school of provenance	
D1.2_B_4 - Bachelor students enrolled in the first course year subdivided per grade of the school-leaving examination	

The list continues on the next page:

A001 - Information Engineering

D – MONITORING AND RESULTS

D1.2_M_1 - Master students enrolled in the first course year

D1.2_M_2 - Master students enrolled in the first course year subdivided per geographical provenance

D1.2_M_3 - Master students enrolled in the first course year subdivided per first cycle programme of provenance

D1.2_M_4 - Master students enrolled in the first course year subdivided per graduation grade

D2 - Students' learning

Students' learning

D1.2_1 - Results of the tests for the assessment of the students' learning

Further monitoring

D3 - Students' progression in their studies

Enrolments in the different course years

D3.1_B - Bachelor enrolments in the different course years

D3.1_M - Master enrolments in the different course years

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes

Kion University

Language English

Logout

A001 - Information Engineering

D – MONITORING AND RESULTS

Dropouts

D3.2_B - Bachelor dropouts

D3.2_M - Master dropouts

Credits acquired by the students

D3.3_B - Bachelor credits acquired by the students passing from one course year to the successive one

D3.3_M - Master credits acquired by the students passing from one course year to the successive one

Graduation time

D3.4_B - Bachelor graduates

D3.4_M - Master graduates

A001 - Information Engineering

D – MONITORING AND RESULTS

D4 - Students' opinion on the educational process

Students' opinion on the didactic units

Students' opinion on the training periods
outside UniversityStudents' opinion on the periods of
international mobilityOpinion of the final year students on
educational process and support services**D5 - Graduates' placement**

Graduates' job placement

Prosecution of the studies in the second cycle
programmesEmployed graduates' opinions on the
education receivedEmployers' opinion on the graduates'
education (*optional*)

2.9.7 E – MANAGEMENT SYSTEM FOR QUALITY

The folder contains the information about the policy and organization for the quality assurance of the structure the study programme belongs to and the management system for quality of the study programme.

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes	
Kion University	Language English Logout
A001 - Information Engineering	E - MANAGEMENT SYSTEM FOR QUALITY
E1 - Policy and organization for quality assurance	
Policy for quality assurance	
Organization for quality assurance	
E2- Management system of the study programme	
Management system of the study programme	
E2 - Revision	
Management of the revision process	
Results of the revision process	
E3 - Publicity of information	
Publicity of the documentation for the quality assurance of the study programme	

3. ADVANCED FEATURES: DEFINITION OF THE BASIC INFORMATION

This feature offers the possibility to describe the 'voices' used in the software, particularly those that regard the definition of the curriculum and the characteristics of the modules.

This is NOT a mandatory activity for the quality assurance of the study programmes. It is only an optional activity that can be used in order to insert into the system a description of the voices used by the software.

This feature is only available to users having the "ROLE_SYSTEM" role.

The menu contains the following functions:

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes Kion University Logout	
Academic Years	
Teacher Roles	
Teachers	
Secondary Schools	
Typologies of Educational Activities	
Forms of Education	
Teaching Periods	
Study Programmes Typologies	
Assessment Methods	
Assessment Metrics	

3.1 ACADEMIC YEARS

This function is available only to registered users with "ROLE_SYSTEM" role for the definition and

management of the academic years.

The user can insert new academic years, delete academic years (only if not already used by other study programmes), or update the following information on the academic year:

- academic year;
- academic year short description.

Note: Academic years are shared among all the Universities, so their description should not be modified because otherwise the modification will affect all the other Universities.

3.2 TEACHER ROLES

This function is available only to registered users with “ROLE_SYSTEM” role for the definition and management of the teacher roles (e.g. lecturer, assistant professor, visiting professor).

The user can insert new teacher roles, delete teachers roles (only if not already referred to other teachers), or update the following information of the teacher role:

- teacher roles code;
- teacher roles short description;
- teacher roles long description.

Note: Teacher roles are shared among all the Universities, so their description should not be modified because otherwise the modification will affect all the other Universities.

3.3 TEACHERS

This function is available only to registered users with “ROLE_SYSTEM” role for the identification and management of the teachers of the selected University.

The user can insert new teachers, delete teachers (only if not already engaged in other didactic activities), or update the following information on the teacher:

- teacher code;
- teacher first name;
- teacher last name;
- teacher role;
- teacher URL.

Note: It is possible to insert a new teacher only if it does not already exist a teacher with the same code for the selected University.

3.4 FORMS OF EDUCATION

This function is available only to registered users with “ROLE_SYSTEM” role for the definition and management of the form of education (e.g.: face to face education, distance education, etc).

The user can insert new teaching methods, delete a teaching method (only if not already associated to other didactic activities), or update the following information of the teaching method:

- teaching method code;
- teaching method short description;
- teaching method long description.

Note: Teaching methods are shared among all the Universities, so their description should not be modified because otherwise the modification will affect all the other Universities.

3.5 TEACHING PERIODS

This function is available only to registered users with “ROLE_SYSTEM” role for the definition and management of the teaching periods of the selected University (e.g. semester). The user can insert new teaching periods, delete teaching periods (only if not already associated to other didactic activities), or update the following information of the teaching period:

- teaching period code;
- teaching period short description;
- teaching period long description.

3.6 STUDY PROGRAMME TYPOLOGIES

This function is available only to registered users with “ROLE_SYSTEM” role for the definition and management of the study programme typologies (e.g. undergraduate, graduate).

The user can insert new study programme typologies, delete study programme typologies (only if not already associated to other study programmes), or update the following information of the study programme typology:

- study programme typology code;
- study programme typology duration;
- study programme short description.

Note: Study programme typologies are shared among all the Universities, so their description should not be modified because otherwise the modification will affect all the other Universities.

3.7 SECONDARY SCHOOLS

This function is available only to registered users with “ROLE_SYSTEM” role for the definition and management of the secondary schools of the Country of the selected University.

The user can insert new secondary schools, delete secondary schools (only if not already present in the monitoring table D1.2_B_3), or update the following information of the secondary school:

- secondary school code;
- secondary school short description;
- secondary school long description.

Note: It is possible to insert a new secondary school only if it does not already exist a secondary school with the same code for the selected University.

3.8 TYPOLOGIES OF EDUCATIONAL ACTIVITY

This function is available only to registered users with “ROLE_SYSTEM” role for the definition and management of the typologies of educational activity (e.g. theoretical lessons, practical lessons, laboratories, projects).

The user can insert new typologies of educational activity, delete typologies of educational activity (only if not already associated to other educational activities), or update the following information of the typology of educational activity:

- typology of educational activity code;
- typology of educational activity short description;
- typology of educational activity long description.

Note: Typologies of educational activity are shared among all the Universities, so their description should not be modified because otherwise the modification will affect all the other Universities.

3.9 ASSESSMENT METHODS

This function is available only to registered users with “ROLE_SYSTEM” role for the definition and management of the assessment methods (e.g. oral, written).

The user can insert new assessment methods, delete assessment methods (only if not already associated to other educational activities), or update the following information of the assessment method:

- assessment method code;
- assessment method short description;
- assessment method long description.

Note: Assessment methods are shared among all the Universities, so their description should not be modified because otherwise the modification will affect all the other Universities.

3.10 ASSESSMENT METRICS

This function is available only to registered users with “ROLE_SYSTEM” role for the definition and management of the assessment metrics (e.g. grade, judgement).

The user can insert new assessment metric, delete assessment metric (only if not already associated to other educational activities), or update the following information of the assessment metric:

- assessment metric code;
- assessment metric short description;
- assessment metric long description.

Note: Assessment metrics are shared among all the Universities, so their description should not be modified because otherwise the modification will affect all the other Universities.

4. ADVANCED FEATURES: STRUCTURED DESCRIPTION OF THE DIDACTIC UNITS

Regarding the field B2 - Design and planning of the educational process, the system lets the user to define the curriculum and the characteristics of the modules (credits, contents, typologies of educational activities, etc.).

Note: This is NOT a mandatory activity for the quality assurance of the study programmes. It is only an optional activity that can be used for a structured description of the didactic units.

TEMPUS DOQUP - Documentation for Quality Assurance of Study Programmes

Kion University

Language English

[Logout](#)

Code	X025
Short Description	Mathematics 2
Course Year	1
Teaching Period	Second Semester
Theoretical lessons	30 Hours, 6 Credits
Practical lessons	10 Hours, 2 Credits
Credits	8
Teaching method	Face to face
Assessment methods	Written examinations
Assessment metric	Attribution of a final grade
Teachers	John Smith, Theory, 2 credits, 20 hours Marc Cod, Practical lesson, 1 credits, 10 hours
Preparatory didactic units	Mathematics 1
Didactic material of reference	Exercise book
Contents	The course ...
Learning outcomes	The course ...

5. ADVANCE FEATURES: WEB SERVICE FOR THE MANAGEMENT OF MONITORING TABLES

This feature consists in the insertion into the system of all the information contained in the monitoring tables of area 'D'. This information cannot be inserted via the GUI (graphic user interface), thus DOQUP provides a RESTFUL web service that leads you to retrieve, insert and delete the data about the monitoring tables of area 'D' for a specific study programme. It is up to you the implementation of the client.

Note: This is NOT a mandatory activity for the quality assurance of the study programmes. It is only an optional activity that can be used in order to insert into the system the information of the monitoring tables.

The web service permits the following three operations:

- get monitoring data: it returns the data contained in the monitoring table;
- insert monitoring data: it inserts the data in the monitoring table;
- delete monitoring data.

5.1 GET MONITORING DATA

The operation returns the data contained in the monitoring table.

Address: <http://doqup-test.kion.it/api/stat/get/{uniCod}/{spCod}/{tableName}>

This URL is parametric, composing the parameter you can access to all information needed:

- {uniCod} is the University code, mapped by the table below:

AZ01	Baku State University
AZ02	Khazar University
AZ03	Azerbaijan Medical University
AZ04	Odlar Yurdu University
AZ05	Qafqaz University
KA01	Kazakh Leading Academy of Architecture and Civil Engineering
KA02	Kazakh Ablai Khan University of International Relations and World Languages
KA03	KazNTU N.A. K.I.Satpayev
KA04	Eurasian National University N.A. L. Gumilyov
KY01	Kyrgyz National University N.A. Jussup Balasagyn
KY02	Bishkek Academy of Finance and Economics
KY03	Naryn State University
TA01	Tajik Institute of Entrepreneurship and Services
TA02	Tajik National University
TA03	Technological University of Tajikistan

- {spCod} is the code of the study programme you are interested in;
- {tableName} is the name of the monitoring table:

D1.1_B	Results of the assessment of the mastery of the admission requirements
D1.2_B_1	Bachelor students enrolled at the first course year
D1.2_B_2	Bachelor students enrolled at the first course year subdivided per geographical provenance
D1.2_B_3	Bachelor students enrolled at the first course year subdivided per school of provenance
D1.2_B_4	Bachelor students enrolled at the first course year subdivided per grade of the school leaving examination
D1.2_M_1	Master students enrolled at the first course year
D1.2_M_2	Master students enrolled at the first course year subdivided per geographical provenance
D1.2_M_3	Master students enrolled at the first course year subdivided per first cycle programme of provenance
D1.2_M_4	Master students enrolled at the first course year subdivided per graduation grade
D2.1	Results of the tests for the assessment of the student's learning
D3.1_B	Bachelor enrolments at the different course years
D3.1_M	Master enrolments at the different course years
D3.2_B	Bachelor dropouts
D3.2_M	Master dropouts
D3.3_B	Bachelor credits acquired by the students passing from one course year to

	the successive one
D3.3_M	Master credits acquired by the students passing from one course year to the successive one
D3.4_B	Bachelor graduates
D3.4_M	Master graduates

An example:

http://127.0.0.1:8888/api/stat/get/AZ01/PROVA-1/D1_2_B_3

This URL returns a JSON object, a response example is:

```
[{
  "rowId":0,
  "row":
  {
    "stuProId":1,
    "shortDes":"Prova",
    "dtIns":1383215205000,
    "stuNum":12314,
    "acadYear":2014,
    "usrIns":"Administrator",
    "schoolId":2,
    "d12B3Id":1
  }
}]
```

5.2 INSERT MONITORING DATA

The operation inserts the data in the monitoring table.

Address: <http://127.0.0.1:8888/api/stat/put/{tableName}>

The above URL is parametric in table name (see the list of the table names above).

The request must have a JSON payload.

DOQUP provides the Java library containing the pre-built structures, one for each monitoring tables. The DoqupWsStruct.jar is available for the download from the DOQUP application.

This inserting function is only for registered users: users authentication is required before calling this URL.

Below there is a sample code to insert one record into the table D1_1_B_1 using Jersey library and Jackson library.

```

import it.kion.doqup.ps.gwt.server.service.ws.struct.D12b3;

import java.util.ArrayList;
import java.util.List;

import javax.ws.rs.core.MediaType;

import org.codehaus.jackson.jaxrs.JsonJaxrsClient;

import com.sun.jersey.api.client.Client;
import com.sun.jersey.api.client.ClientHandlerException;
import com.sun.jersey.api.client.ClientRequest;
import com.sun.jersey.api.client.ClientResponse;
import com.sun.jersey.api.client.WebResource;
import com.sun.jersey.api.client.config.ClientConfig;
import com.sun.jersey.api.client.config.DefaultClientConfig;
import com.sun.jersey.api.client.filter.ClientFilter;
import com.sun.jersey.api.representation.Form;

public class TestClass {

    private static Client pClient = null;
    public static Client getClient(){
        if(pClient==null){
            ClientConfig config = new DefaultClientConfig();
            config.getClasses().add(JsonJaxrsClient.class);
            pClient = Client.create(config);
            pClient.setFollowRedirects(false);

            pClient.addFilter(new ClientFilter() {
                private ArrayList<Object> cookies;
                @Override
                public ClientResponse handle(ClientRequest request) throws
ClientHandlerException {
                    if (cookies != null) {
                        request.getHeaders().put("Cookie", cookies);
                    }
                    ClientResponse response = getNext().handle(request);
                    // copy cookies
                    if (response.getCookies() != null) {
                        if (cookies == null) {
                            cookies = new ArrayList<Object>();
                        }
                        // A simple addAll just for illustration (should probably check for
duplicates and expired cookies)
                        cookies.addAll(response.getCookies());
                    }
                    return response;
                }
            });
        }
        return pClient;
    }

    /**
     * CLIENT SAMPLE
     * @param args
     */
    public static void main(String[] args) {
        TestClass testClass = new TestClass();
        try {
            Client client = TestClass.getClient();

            // LOGIN

```

```

        WebResource webResource =
client.resource("http://doqup.kion.it/j_spring_security_check");
        com.sun.jersey.api.representation.Form form = new Form();
        form.putSingle("j_username", "Administrator");
        form.putSingle("j_password", "Administrator");
        form.putSingle("j_domain", "AZ01");
        ClientResponse resp =
webResource.type(MediaType.APPLICATION_FORM_URLENCODED_TYPE).post(ClientResponse.class, form);
        resp.getStatus();

//          REQUEST
        testClass.insertRecord(client);

        } catch (Exception e) {
            e.printStackTrace();
        }
    }

    private void insertRecord(Client client) {
        WebResource webResource;
        webResource = client.resource("http://doqup.kion.it/api/stat/put/D1_2_B_3/");
        D12b3 s = new D12b3();
        s.setSpCod("PROVA-1");
        s.setSchoolCod("aaa1");
        s.setLangDes("eng");
        s.setSchoolDes("WEB SERVICE: scuola di prova");
        s.setStuNum(121L);
        s.setYear(2014L);
        ClientResponse response = webResource.entity(s,
        MediaType.APPLICATION_JSON_TYPE).post(ClientResponse.class);
        System.out.println("Output from Server ....");
        System.out.println("Response: "+response.getStatus()); // Status 200 o 201
        System.out.println("Data Count: "+response.getEntity(String.class));
    }
}

```

5.3 DELETE MONITORING DATA

The operation deletes one record from the monitoring tables.

Address: <http://127.0.0.1:8888/api/stat/put/rem/{tableName}/{id}/>

The URL is parametric in table name (see the list of the table names above) and in ID (which is a unique identifier) of the record in the table.

This example shows how to delete the record with ID=5 from table D1.1_B.

```

private void deleteRecordTable(Client client){
    WebResource webResource = client.resource("http://doqup.kion.it/api/stat/rem/D1_1_B_1/5");
    ClientResponse response = webResource.delete(ClientResponse.class);
    if (response.getStatus() != 200) {
        throw new RuntimeException("Failed : HTTP error code : " + response.getStatus());
    }
    String output = response.getEntity(String.class);
    System.out.println("Output from Server ....");
    System.out.println(output);
}

```

6. ANNEX: DESCRIPTION OF THE MONITORING TABLES

The following pages describe the statistic tables:

D1.1_B – Results of the assessment of the mastery of the admission requirements			
	a.y. xx-3/xx-2	a.y. xx-2/xx-1	a.y. xx-1/xx
N. of students with an admission grade between ... and ...			
...			

D1.2_B_1 – Bachelor students enrolled in the first course year			
	a.y. xx-3/xx-2	a.y. xx-2/xx-1	a.y. xx-1/xx
New enrollments			
...			

D1.2_B_2 - Bachelor students enrolled in the first course year subdivided per geographical provenance			
	a.y. xx-3/xx-2	a.y. xx-2/xx-1	a.y. xx-1/xx
Residents in the same province			
Residents in the same region			
...			

D1.2_B_3 - Students enrolled in the first course year subdivided per school of provenance

	a.y. xx-3/xx-2	a.y. xx-2/xx-1	a.y. xx-1/xx
School 1			
...			

D1.2_B_4 – Bachelor students enrolled in the first course year subdivided per grade of the school-leaving examination

	a.y. xx-3/xx-2	a.y. xx-2/xx-1	a.y. xx-1/xx
N. of students with grade of the school-leaving examination between ... and ...			
...			

D1.2_M_1 – Master students enrolled in the first course year

	a.y. xx-3/xx-2	a.y. xx-2/xx-1	a.y. xx-1/xx
New enrolments			
...			

D1.2_M_2 - Master students enrolled in the first course year subdivided per geographical provenance

	a.y. xx-3/xx-2	a.y. xx-2/xx-1	a.y. xx-1/xx
Residents in the same province			
Residents in the same region			
...			

D1.2_M_3 - Master students enrolled in the first course year subdivided per first cycle programme of provenance

	a.y. xx-3/xx-2	a.y. xx-2/xx-1	a.y. xx-1/xx
Study Programme 1			
...			

D1.2_M_4 – Master students enrolled in the first course year subdivided per graduation grade

	a.y. xx-3/xx-2	a.y. xx-2/xx-1	a.y. xx-1/xx
N. of students with graduation grade between ... and ...			
...			

D2- Results of the tests for the assessment of the students' learning												
	a.y. xx-3/xx-2				a.y. xx-2/xx-1				a.y. xx-1/xx			
	N. of students	N. of students who have overcome the exam	Medium grade	Variance	N. of students	N. of students who have overcome the exam	Medium grade	Variance	N. of students	N. of students who have overcome the exam	Medium grade	Variance
Didactic unit 1												
...												

D3.1_B – Bachelor enrolments in the different course years			
	a.y. xx-3/xx-2	a.y. xx-2/xx-1	a.y. xx-1/xx
N. of students enrolled in the 1 st course year			
Students enrolled in the 2 nd course year holding to the reference cohort			
Total number of students enrolled in the 2 nd course year			
Students enrolled in the 3 rd course year holding to the reference cohort			
Total number of students enrolled in the 3 rd course year			
Students enrolled in the 4 th course year holding to the reference cohort			
Total number of students enrolled in the 4 th course year			
Out-of-course students holding to the reference cohort			
Total number of out-of-course students			

D3.1_M – Master enrolments in the different course years			
	a.y. xx-3/xx-2	a.y. xx-2/xx-1	a.y. xx-1/xx
N. of students enrolled in the 1 st course year			
Students enrolled in the 2 nd course year holding to the reference cohort			
Total number of students enrolled in the 2 nd course year			
Out-of-course students** holding to the reference cohort			
Total number of out-of-course students			

D3.2_B – Bachelor dropouts			
	a.y. xx-3/xx-2	a.y. xx-2/xx-1	a.y. xx-1/xx
Dropouts between the 1st and 2 nd course year			
...			
Dropouts between the 2 nd and 3 rd course year			
...			
Dropouts between the 3 rd and 4 th course year			
...			

D3.2_M – Master dropouts			
	a.y. xx-3/xx-2	a.y. xx-2/xx-1	a.y. xx-1/xx
Dropouts between the 1 st and 2 nd course year			
...			

D3.3_B – Bachelor credits acquired by the students passing from one course year to the successive one			
	a.y. xx-3/xx-2	a.y. xx-2/xx-1	a.y. xx-1/xx
N. of students enrolled in the 2 nd course year holding to the reference cohort			
Median of the credits acquired by the students enrolled in the 2 nd course year holding at the reference cohort			
Medium value of the credits acquired by the students enrolled in the 2 nd course year holding to the reference cohort			
Variance of the credits acquired by the students enrolled in the 2 nd course year holding to the reference cohort			
N. of students enrolled in the 3 rd course year holding to the reference cohort			
Median of the credits acquired by the students enrolled in the 3 rd course year holding at the reference cohort			
Medium value of the credits acquired by the students enrolled in the 3 rd course year holding to the reference cohort			
Variance of the credits acquired by the students enrolled in the 3 rd course year holding to the reference cohort			

(the table continues in the next page)

A001 - Biological Engineering

D - RESULTS

N. of students enrolled in the 4 th course year holding to the reference cohort			
Median of the credits acquired by the students enrolled in the 4 th course year holding at the reference cohort			
Medium value of the credits acquired by the students enrolled in the 3 rd course year holding to the reference cohort			
Variance of the credits acquired by the students enrolled in the 4 th course year holding to the reference cohort			
N. of students out-of-course students holding to the reference cohort			
Median of the credits acquired by the out-of-course students holding to the reference cohort			
Medium value of the credits acquired by the out-of-course students holding to the reference cohort			
Variance off the credits acquired by the out-of-course students holding to the reference cohort			

D3.3_M – Master credits acquired by the students passing from one course year to the successive one			
	a.y. xx-3/xx-2	a.y. xx-2/xx-1	a.y. xx-1/xx
N. of students enrolled in the 2 nd course year holding to the reference cohort			
Median of the credits acquired by the students enrolled in the 2 nd course year holding at the reference cohort			
Medium value of the credits acquired by the students enrolled in the 2 nd course year holding to the reference cohort			
Variance of the credits acquired by the students enrolled in the 2 nd course year holding to the reference cohort			
N. of students out-of-course students holding to the reference cohort			
Median of the credits acquired by the out-of-course students holding to the reference cohort			
Medium value of the credits acquired by the out-of-course students holding to the reference cohort			
Variance off the credits acquired by the out-of-course students holding to the reference cohort			

D3.4_B – Bachelor graduates			
	a.y. xx-3/xx-2	a.y. xx-2/xx-1	a.y. xx-1/xx
Graduates holding to the cohort of a.y. xx-3/xx-2			
Graduates holding to the cohort of a.y. xx-4/xx-3			
...			

D3.4_M – Master graduates			
	a.y. xx-3/xx-2	a.y. xx-2/xx-1	a.y. xx-1/xx
Graduates holding to the cohort of a.y. xx-2/xx-1			
Graduates holding to the cohort of a.y. xx-3/xx-2			
...			

7. ANNEX: DATA MODELING

This section describes the main entities involved in the documentation for quality assurance of study programmes.

7.1 BASIC TABLES

Basic tables independent by the University:

DOQUP_ACAD_YEAR

ACAD_YEAR: NUMBER(4) NOT NULL
USR_INS: VARCHAR2(255) NOT NULL
DT_INS: DATE NOT NULL
USR_UPD: VARCHAR2(255) NULL
DT_UPD: DATE NULL

DOQUP_STU_PRO_TYPE

STU_PRO_TYPE_COD: VARCHAR2(20) NOT NULL
YEARS_DURATION: NUMBER(3) NULL
USR_INS: VARCHAR2(255) NOT NULL
DT_INS: DATE NOT NULL
USR_UPD: VARCHAR2(255) NULL
DT_UPD: DATE NULL

DOQUP_EDU_FORM

EDU_FORM_COD: VARCHAR2(20) NOT NULL
USR_INS: VARCHAR2(255) NOT NULL
DT_INS: DATE NOT NULL
USR_UPD: VARCHAR2(255) NULL
DT_UPD: DATE NULL

DOQUP_EDU_ACT_TYPE

EDU_ACT_TYPE_COD: VARCHAR2(20) NOT NULL
USR_INS: VARCHAR2(255) NOT NULL
DT_INS: DATE NOT NULL
USR_UPD: VARCHAR2(255) NULL
DT_UPD: DATE NULL

DOQUP_ASSESS_METHOD

ASSESS_METHOD_COD: VARCHAR2(20) NOT NULL
USR_INS: VARCHAR2(255) NOT NULL
DT_INS: DATE NOT NULL
USR_UPD: VARCHAR2(255) NULL
DT_UPD: DATE NULL

DOQUP_ASSES_CRITERIA

ASSESS_CRITERIA_COD: VARCHAR2(20) NOT NULL
USR_INS: VARCHAR2(255) NOT NULL
DT_INS: DATE NOT NULL
USR_UPD: VARCHAR2(255) NULL
DT_UPD: DATE NULL

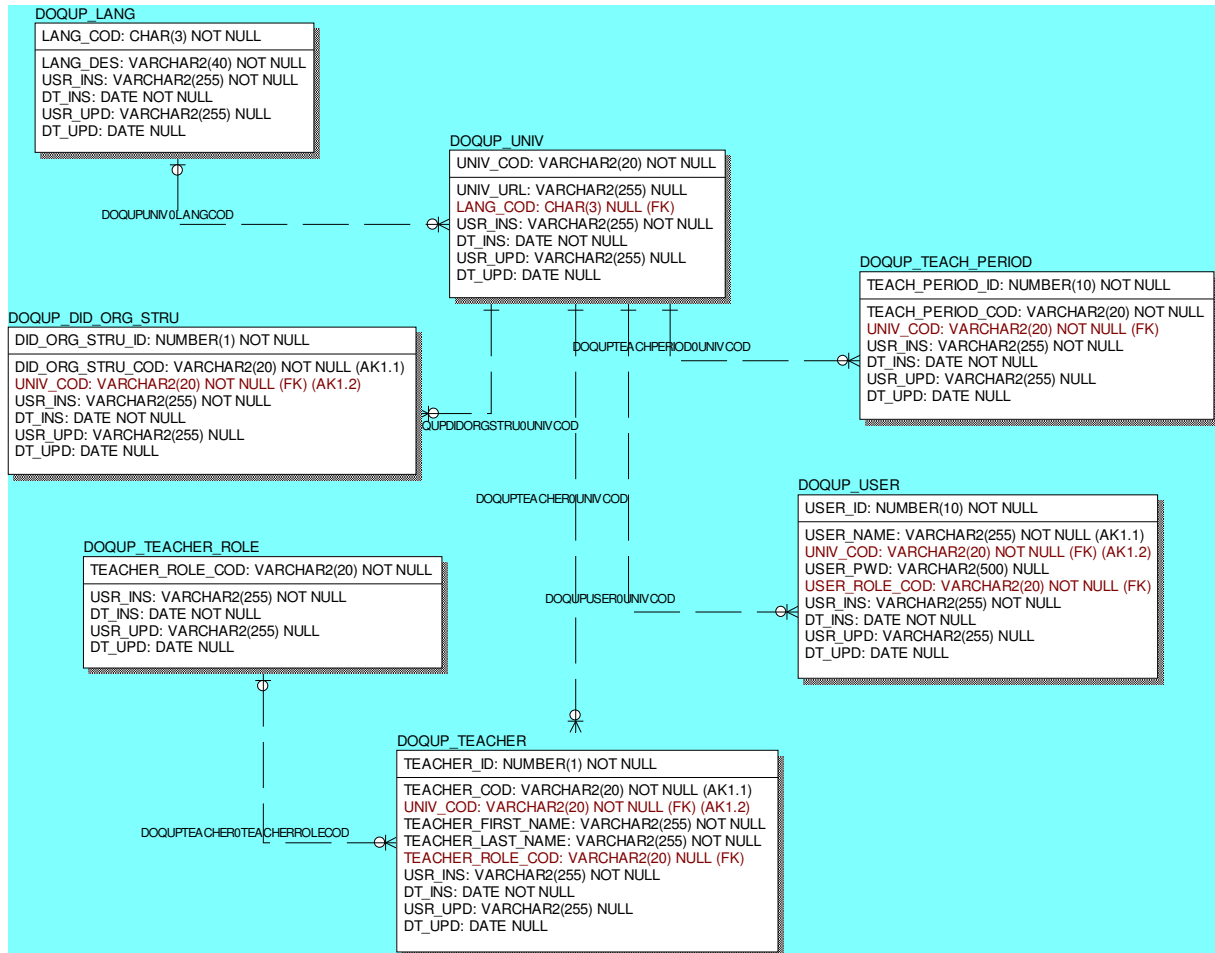
DOQUP_USER_ROLE

USER_ROLE_COD: VARCHAR2(20) NOT NULL
USR_INS: VARCHAR2(255) NOT NULL
DT_INS: DATE NOT NULL
USR_UPD: VARCHAR2(255) NULL
DT_UPD: DATE NULL

Note that the descriptions of the data are not included in the tables but are managed in only one specific description table.

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Basic tables depending by the University:

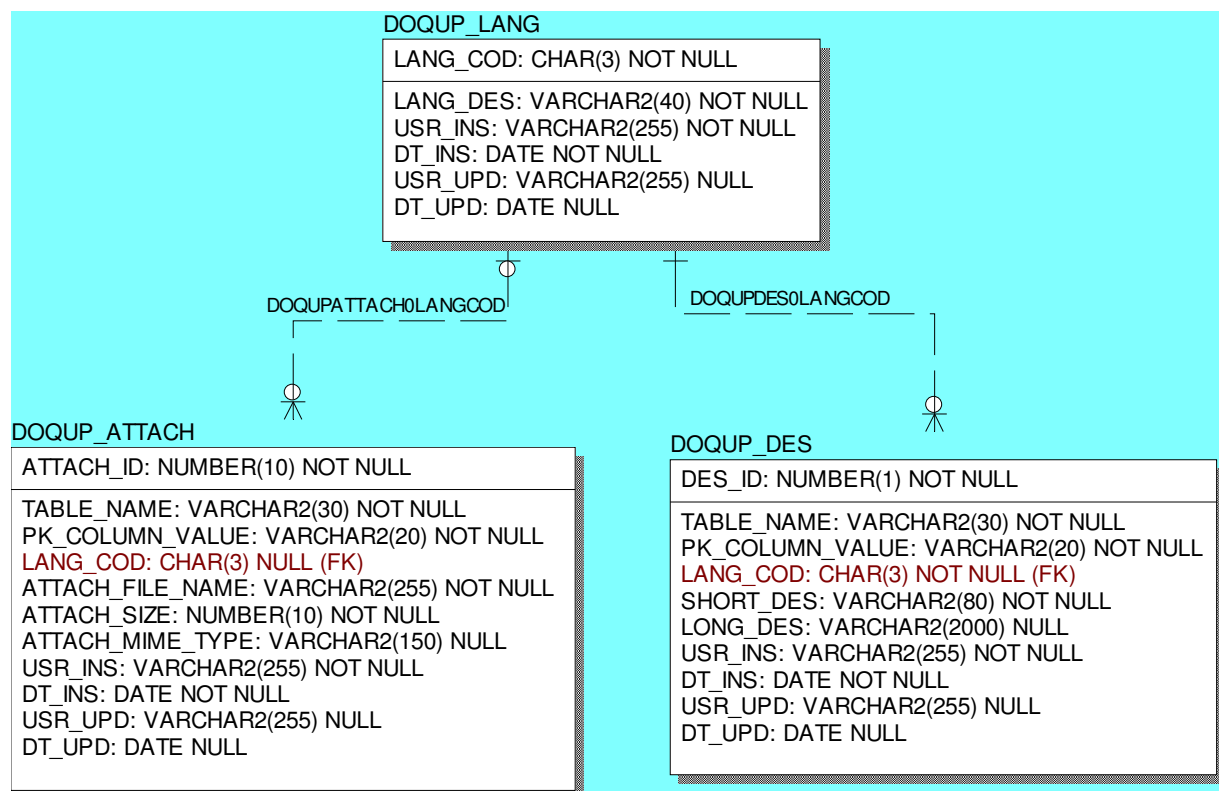


Note that the descriptions of the data are not included in the table but are managed in only one specific descriptions table.

7.2 DESCRIPTIONS AND ATTACHMENTS

The multi-language descriptions and attachments of all the data are stored in only one centralized entity. The unique key of the table, that uniquely identifies a description/attachment, is the tuple: language code, table name, Primary key Column Value.

Every record has a short description (up to 80 characters) and, optionally, a long description (up to 2000 characters).



7.3 STANDARDS, REQUIREMENTS AND DOCUMENTATION

These entities contain the standards for the quality assurance and the associated quality requirements:

A - Needs and Objectives

- A1 - Educational needs of the labour market
- A2 - Educational objectives
- A3 - Learning outcomes

B - Educational process

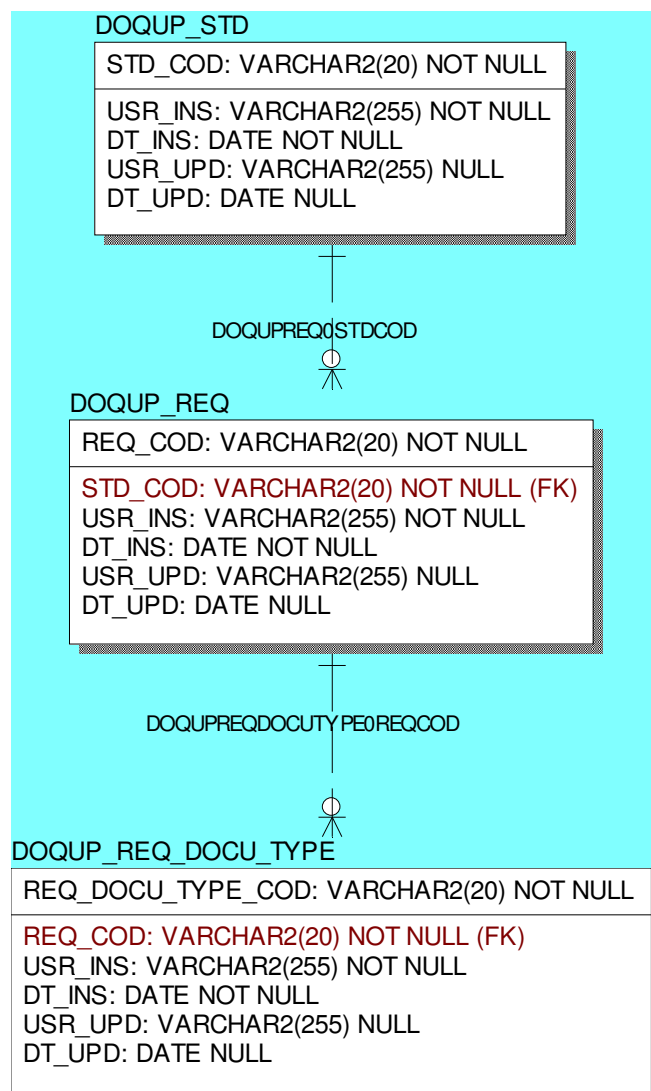
- B1 - Admission qualifications and requirements
- B2 - Design and planning of the educational process
- B3 - Realization of the educational process

C - Resources

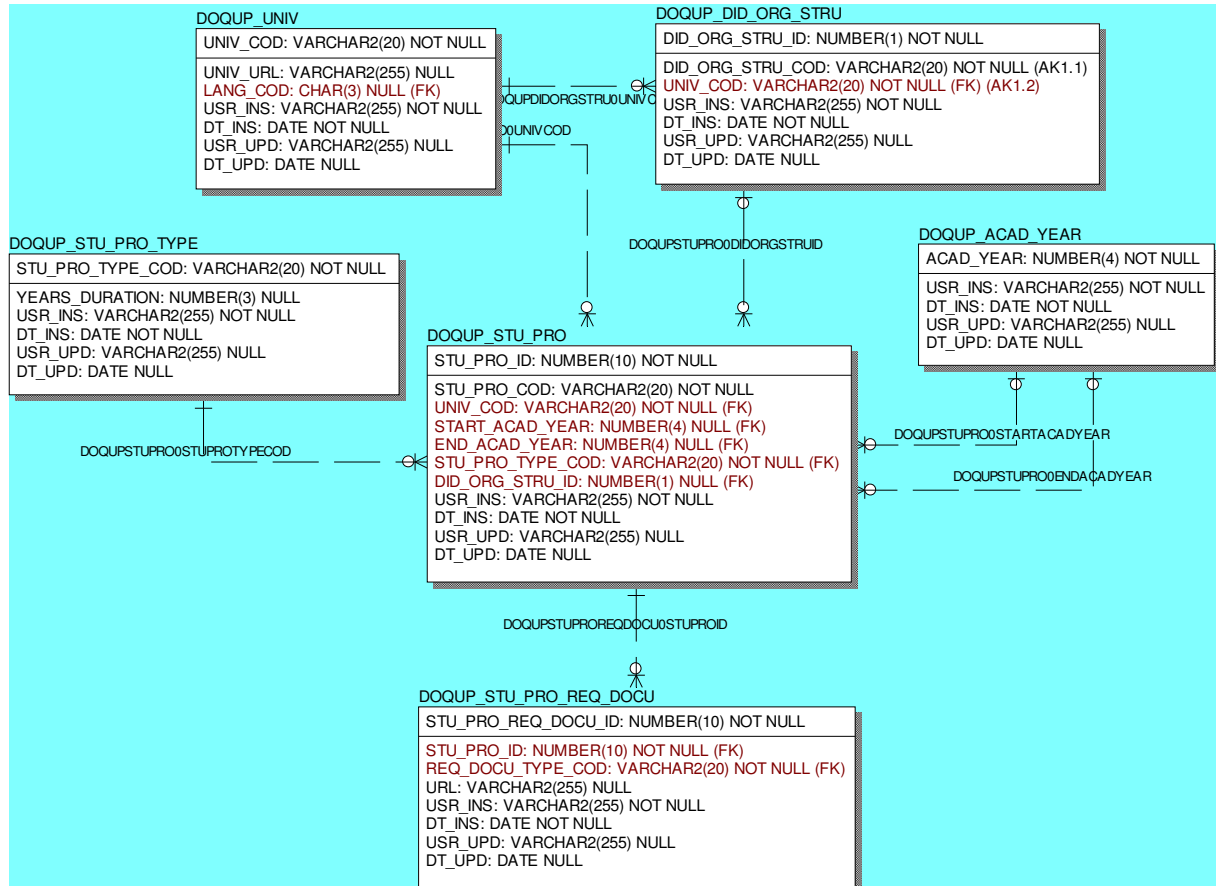
- C1 - Teaching staff

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- C2 - Facilities
 - C3 - Financial resources (*optional*)
 - C4 - Student support services
 - C5 - Partnerships
- D – Monitoring and Results
- D1 - Entrance students
 - D2 - Students' learning
 - D3 - Students' progression in their studies
 - D4 - Students' opinions on the educational process
 - D5 - Graduates' placement
- E - Management system for quality
- E1 - Policy and organization for quality assurance
 - E2 - Management system for quality
 - E3 - Revision
 - E4 - Publicity of information



7.4 STUDY PROGRAMMES



7.5 CURRICULUM

