Study Information API

Education

Tieto Healthcare and Welfare AB

tieto.com

Version 1.0 2015-01-30

# **Technical Specification**

Study Information API



Tieto Healthcare and Welfare AB Education

Version 1.0 2015-01-30

# **Table of Contents**

| 1 Introduction             |    |
|----------------------------|----|
| 1.1 Prerequisites          | 4  |
| 2 Supported school types   |    |
| z Supported School types   | 4  |
| 3 Study plan               | 5  |
| 3.1 Description            | 5  |
| 3.2 Domain model           | 5  |
| 3.3 Entities               | 5  |
| 3.3.1 StudyPlan            | 5  |
| 3.3.2 StudyPlanCourse      | 5  |
| 3.3.3 Student              | 6  |
| 3.3.4 Unit                 | 6  |
| 3.3.5 Program              |    |
| 4 Subject plan4            | c  |
| 4.1 Description            |    |
| 4.1 Description            |    |
| 4.3 Entities               |    |
|                            |    |
| 4.3.1 SubjectPlan          |    |
| 4.3.3 Student              |    |
| 4.3.4 Unit                 |    |
| 4.3.4 01111                |    |
| 5 Course choice            | 10 |
| 5.1 Description            |    |
| 5.2 Domain model           | 10 |
| 5.3 Entities               | 10 |
| 5.3.1 CourseChoice         | 10 |
| 5.3.2 CourseChoiceCourse   | 10 |
| 5.3.3 Student              | 11 |
|                            |    |
| 6 Subject choice           |    |
| 6.1 Description            |    |
| 6.2 Domain model           |    |
| 6.3 Entities               |    |
| 6.3.1 SubjectChoice        |    |
| 6.3.2 SubjectChoiceSubject |    |
| 6.3.3 Student              | 13 |
| 7 Services                 | 14 |
| 7.1 Study plan             |    |
| 7.2 Subject plan           |    |
| 7.3 Course choice          |    |
| 7.4 Subject choice         |    |



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| Tieto Healthcare and Welfare AB<br>Education | Version 1.0<br>2015-01-30 |
|--|---------------------------|
| 8 Appendix                                   | 17                        |
| 8.1 References                               |                           |
| 8.2 Vocabulary                               | 17                        |



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Version 1.0 2015-01-30

#### 1 Introduction

The Study Information API in Lifecare Exchange Services provides services that make it possible to get study plan and subject plan for students and to update or add course choices and subject choices. The services in the Study Information API are accessed via URIs.

This document describes following:

- Which study information that a user can get via the Study Information API.
- How the study information is divided into entities and how these entities are structured.

#### 1.1 Prerequisites

Before you can get access to the Study Information API you must request a license key from Tieto. You should have basic knowledge on Swedish school system and W3C XML before you start using the API.

## 2 Supported school types

The table below describes the supported types of school.

| School type   | Description                                  | Code |
|---|--|------|
| Compulsory School                                   | Compulsory school                            | GR   |
| Compulsory School For Learning Disabilities         | Compulsory school for learning disabilities  | S    |
| Upper Secondary School                              | Secondary school. 3-4 years education        | GY   |
| Upper Secondary School For<br>Learning Disabilities | Secondary school for learning disabilities   | GS   |
| Swedish For Immigrants School                       | Swedish for immigrants school                | SF   |
| Adult School For Learning Disabilities              | School for adults with learning disabilities | SV   |
| Municipal Adult School                              | Municipality school for adults               | KV   |
| Higher Vocational Education                         | Higher vocational education                  | YH   |



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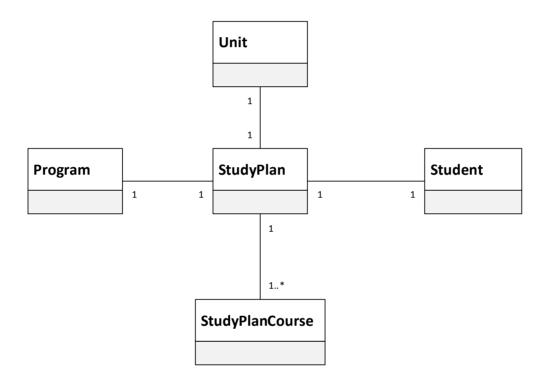
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## 3 Study plan

## 3.1 Description

This chapter describes the study plan entities and their attributes.

#### 3.2 Domain model



#### 3.3 Entities

# 3.3.1 StudyPlan

| Name    | Description   | Read-only |
|---------|---|-----------|
| student | The student   | Yes       |
| unit    | The responsible school unit.                          | Yes       |
| program | Program information a student's individual study plan | Yes       |
| courses | All study plan courses                                | Yes       |

## 3.3.2 StudyPlanCourse



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| Name                       | Description  |   | Read-only |
|----------------------------|--|---|-----------|
| code                       | SCB course code  |   | Yes       |
| name                       | Name for the course  |   | Yes       |
| type                       | Type of course   |   | Yes       |
| deviation                  | Deviation from the program. No NoDeviation  Added  Removed   | t set for the adult school types. Indicates that the course is part of the program as default Indicates that the course has been added Indicates that the course has been removed | Yes       |
| content                    | Information about a course specialization. Only set for specialized courses. Not set for the adult school types. |   | Yes       |
| points                     | Points for the course  |   | Yes       |
| hours                      | Hours for the course   |   | Yes       |
| grade                      | Grade for the course. Only set if the grade is locked  |   | Yes       |
| gradedate                  | Grade date   |   | Yes       |
| start                      | Start date for the course  |   | Yes       |
| end                        | End date for the course  |   | Yes       |
| trialperformed             | Indicates that a trial of the course knowledge has been performed.  Not set for the adult school types.          |   | Yes       |
| specialorientedsubjectplan | Information about a special oriented subject plan.   |   | Yes       |
| schoolname                 | School name  |   | Yes       |
| continuous                 | Indicates if the course continuous   |   | Yes       |

## 3.3.3 Student

| Name | Description  | Read-only |
|------|--|-----------|
| id   | Student identity. The id can be GUID or PID for the student. | Yes       |
| name | Student name   | Yes       |

## 3.3.4 Unit

| Name           | Description      | Read-only |
|----------------|------------------|-----------|
| schoolname     | School name      | Yes       |
| schoolunitname | School unit name | Yes       |
| schoolunitcode | School unit code | Yes       |





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| Name       | Description                             | Read-only |
|------------|---|-----------|
| schooltype | School type, see supported school types | Yes       |

# 3.3.5 Program

| Name                 | Description  |  | Read-only |
|----------------------|--|--|-----------|
| code                 | Program code   |  | Yes       |
| name                 | Program name   |  | Yes       |
| type                 | Program type   |  | Yes       |
| orientation          | Program orientation/specialization   | n  | Yes       |
| extent               | The program extent for the stude Complete  Reduced  Extended                           | Indicates that the program extent is complete for the student Indicates that the program is reduced for the student Indicates that the program is extended for the student | Yes       |
| individuallytailored | Indicates if the program is individually tailored                                      |  | Yes       |
| profile              | The program profile.   |  | Yes       |
| vocationaloutcome    | Information about a vocational outcome. Only set for programs with vocational outcome. |  | Yes       |



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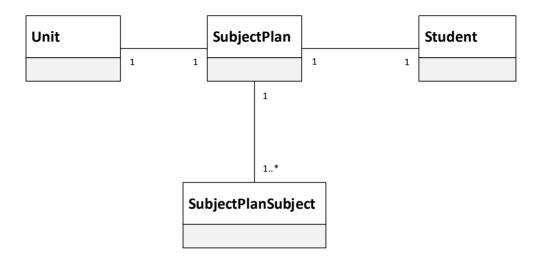
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## 4 Subject plan

## 4.1 Description

This chapter describes the subject plan entities and their attributes.

#### 4.2 Domain model



#### 4.3 Entities

## 4.3.1 SubjectPlan

| Name     | Description                                    | Read-only |
|----------|--|-----------|
| student  | The student                                    | Yes       |
| unit     | The responsible school unit.                   | Yes       |
| subjects | All subjects that are part of the subject plan | Yes       |

## 4.3.2 SubjectPlanSubject

| Name     | Description          | Read-only |
|----------|----------------------|-----------|
| code     | SCB subject code     | Yes       |
| name     | Name for the subject | Yes       |
| language | Language code        | Yes       |



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| Name       | Description                         |  | Read-only |
|------------|-------------------------------------|--|-----------|
| type       | Indicates the type of choice        |  | Yes       |
|            | StudentChoice                       | Indicates that the subject is a<br>"student choice" for student    |           |
|            | LanguageChoice                      | Indicates that the subject is a "language choice" for the student. |           |
|            | IndividualChoice                    | Indicates the subject is an individual choice for the student      |           |
| schoolyear | School year                         |  | Yes       |
| start      | Start date for the subject          |  | Yes       |
| end        | End date for the subject            |  | Yes       |
| schoolname | School name                         |  | Yes       |
| continuous | Indicates if the subject continuous | S  | Yes       |

## 4.3.3 Student

| Name | Description  | Read-only |
|------|--|-----------|
| id   | Student identity. The id can be GUID or PID for the student. | Yes       |
| name | Student name   | Yes       |

#### 4.3.4 Unit

| Name           | Description                             | Read-only |
|----------------|---|-----------|
| schoolname     | School name                             | Yes       |
| schoolunitname | School unit name                        | Yes       |
| schoolunitcode | School unit code                        | Yes       |
| schooltype     | School type, see supported school types | Yes       |



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#### **5 Course choice**

## 5.1 Description

This chapter describes the course choice entities and their attributes.

#### 5.2 Domain model

| CourseChoiceCourse |    |   | CourseChoice |   |   | Student |
|--------------------|----|---|--------------|---|---|---------|
|                    | 1* | 1 |              | 1 | 1 |         |

## 5.3 Entities

## 5.3.1 CourseChoice

| Name    | Description                                    | Read-only |
|---------|--|-----------|
| student | The student                                    | No        |
| courses | All courses that are part of the course choice | No        |

## 5.3.2 CourseChoiceCourse

| Name           | Description  | Read-only   |    |
|----------------|--|---|----|
| code           | SCB course code  |   | No |
| type           | Course type Orientation ProgramSpecialization IndividualChoice   | Orientation Program specialization Individual choice  | No |
| deviation      | Deviation from the program. Not se NoDeviation  Added  Removed   | t for the adult school types. Indicates that the course is part of the program as default Indicates that the course has been added Indicates that the course has been removed | No |
| content        | Information about a course specialization. Only set for specialized courses. Not set for the adult school types. |   | No |
| trialperformed | Indicates that a trial of the course k   | nowledge has been performed.  | No |



— page 10/17

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| Name  | Description                         | Read-only |
|-------|-------------------------------------|-----------|
|       | Not set for the adult school types. |           |
| hours | Hours for the course                | No        |
| start | Start date for the course           | No        |
| end   | End date for the course             | No        |

## 5.3.3 Student

| Name | Description  | Read-only |
|------|--|-----------|
| id   | Student identity. The id can be GUID or PID for the student. | No        |
| name | Student name   | Yes       |



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## 6 Subject choice

## 6.1 Description

This chapter describes the subject plan entities and their attributes.

#### 6.2 Domain model

| SubjectChoiceSubject |    |   | SubjectChoice |   |   | Student |
|----------------------|----|---|---------------|---|---|---------|
|                      | 1* | 1 |               | 1 | 1 |         |

#### 6.3 Entities

# 6.3.1 SubjectChoice

| Name     | Description                                      | Read-only |
|----------|--|-----------|
| student  | The student                                      | No        |
| subjects | All subjects that are part of the subject choice | No        |

# 6.3.2 SubjectChoiceSubject

| Name  | Description  |   | Read-only |
|-------|--|---|-----------|
| code  | SCB subject code   |   | No        |
| type  | Indicates the type of choice StudentChoice  LanguageChoice | Indicates that the subject is a "student choice" for student Indicates that the subject is a "language choice" for the student. | No        |
| start | Start date for the course                                  |   | No        |
| end   | End date for the course                                    | ·   | No        |



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#### 6.3.3 Student

| Name | Description  | Read-only |
|------|--|-----------|
| id   | Student identity. The id can be GUID or PID for the student. | No        |
| name | Student name   | Yes       |



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Version 1.0 2015-01-30

#### 7 Services

All network services are based on HTTP REST technology and organized in school types to match each school structure. Importing information using method HTTP POST and export information using method HTTP GET.

## 7.1 Study plan

The services below gives study plan for a specified student or study plans created within a specified date interval. The output is XML information with the study plans.

Base path for services are: https://host/les/studyinformation/v1/studyinformation.svc/

#### Parameters - Alternative 1:

| Parameter | Mandatory | Description  |
|-----------|-----------|--|
| Id        | Yes       | Student identity. The id can be GUID or PID for the student. |

#### Parameters - Alternative 2:

| Parameter | Mandatory | Description  |
|-----------|-----------|--|
| StartDate | Yes       | Start date in the format YYYY-MM-DD.   |
| EndDate   | Yes       | End date in the format YYYY-MM-DD. The maximum allowed difference between start date and end date is one year. |

#### Services:

| Service   | Description  |
|---|--|
| GetUpperSecondarySchoolStudyPlan                        | Get study plan for upper secondary school student                            |
| GetUpperSecondarySchoolForLearningDisabilitiesStudyPlan | Get study plan for upper secondary school with learning disabilities student |
| GetSwedishForImmigrantsSchoolStudyPlan                  | Get study plan for Swedish for immigrants student                            |
| GetMunicipalAdultSchoolStudyPlan                        | Get study plan for municipal adult school student                            |
| GetAdultSchoolForLearningDisabilitiesStudyPlan          | Get study plan for adult school with learning disabilities student           |
| GetHigherVocationalEducationStudyPlan                   | Get study plan for higher vocational education student                       |



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## 7.2 Subject plan

The services below gives subject plan for a specified student or subject plans created within a specified date interval. The output is XML information with the subject plans.

Base path for services are: https://host/les/studyinformation/v1/studyinformation.svc/

Parameters - Alternative 1:

| Parameter | Mandatory | Description  |
|-----------|-----------|--|
| Id        | Yes       | Student identity. The id can be GUID or PID for the student. |

#### Parameters - Alternative 2:

| Parameter | Mandatory | Description   |
|-----------|-----------|---|
| StartDate | Yes       | Start date in the format YYYY-MM-DD.  |
| EndDate   | Yes       | End date in the format YYYY-MM-DD.  The maximum allowed difference between start date and end date is one year. |

#### Services:

| Service   | Description   |
|---|---|
| GetCompulsorySchoolSubjectPlan                        | Get subject plan for compulsory school student                            |
| GetCompulsorySchoolForLearningDisabilitiesSubjectPlan | Get subject plan for compulsory school with learning disabilities student |

#### 7.3 Course choice

The services below update or add course choices for students. The services take no parameters.

Base path for services are: https://host/les/studyinformation/v1/studyinformation.svc/

#### Services:

| Service   | Description  |
|---|--|
| UpdateUpperSecondarySchoolCourseChoice                        | Update course choice for upper secondary school student                            |
| UpdateUpperSecondarySchoolForLearningDisabilitiesCourseChoice | Update course choice for upper secondary school with learning disabilities student |



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Version 1.0 2015-01-30

## 7.4 Subject choice

The services below update or add subject choices for students. The services take no parameters.

Base path for services are: https://host/les/studyinformation/v1/studyinformation.svc/

#### Services:

| Service  | Description  |
|--|--|
| UpdateCompulsorySchoolSubjectChoice                        | Update subject choice for compulsory school student                            |
| UpdateCompulsorySchoolForLearningDisabilitiesSubjectChoice | Update subject choice for compulsory school with learning disabilities student |



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# 8 Appendix

## 8.1 References

| Name   | Address                                 |
|--|---|
| Study Information API XML schemas and examples | https://github.com/ExchangeServices/API |

# 8.2 Vocabulary

| Word | Description                                  |
|------|--|
| PID  | Personal identity, formatted [YYYYMMDD-NNNN] |
| GUID | Global unique identifier                     |

