# **Technical Specification**

Study Information API



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#### **Tieto Education APIs**

#### Study Information API



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#### 1 Introduction

The Study Information API 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 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

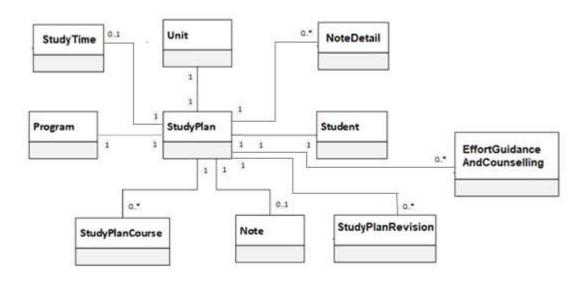


# 3 Study plan

## 3.1 Description

This chapter describes the study plan entities and their attributes.

#### 3.2 Domain model



#### 3.3 Entities

## 3.3.1 Properties

The delivery information of the Study information data that is used to manage the exchange of data between source and target system.

Name	Description
datetime	The date and time the XML information were generated. The format is as [YYYY-MM-DDTHH:MM:SS]
datasource	This is the source identifier of data source
comments	Input values for the service, in free text format.
schooltype	The schooltype of which the data is encompassing
timeframe	Time frame for the study information data



# 3.3.2 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
course	All study plan courses	Yes
note	All notes	Yes
study time	Latest study time of student	Yes
notedetail	All notes with details	Yes
studyplanrevision	study plan revisions	Yes
effortguidanceandcounselling	Effort guidance and counselling information for student	Yes
Placementhistory	Placement history of student	Yes

# 3.3.3 StudyPlanCourse

Name	Description	Read- only
Id	Id of study plan course(GUID)	Yes
code	SCB course code	Yes
name	Name of the course	Yes
nameinenglish	Name of the course in English	Yes
type	Type of course  UpperSecondarySubjects  ProgrammeSpecificSubjects  Orientation  ProgrammeSpecialisation  IndividualOptions  DiplomaProject  OrientationAndProgrammeSpecialisation  UpperSecondarySubjectsForStudentsWithLearningDisabilities  AssessedCourseWork  CommonSubjectsInFurtherEducation  Profile  Outcome  DegreeProject  Other	Yes



Name	Description		Read- only
deviation	NoDeviation	. Not set for the adult school types. Indicates that the course is part of the program as default	Yes
	Added	Indicates that the course has been added	
	Removed	Indicates that the course has been removed	
	Replacement	Indicates that the course has replaced another course. The program is individually tailored.	
	Transformation	Indicates that the course has replaced another course that is not valid any longer.	
comment	Can for example be used for transformed course	or mentioning the course code for a replaced or	Yes
content	Information about a course courses. Not set for the adu	specialization. Only set for specialized all school types.	Yes
contentinenglish	Information about a course specialization in english. 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
connectedgrade	Actual grade in that period		Yes
connectedgradelockdate	Connected grade lock date		Yes
group	Group in which the course is studied		Yes
start	Start date for the course		Yes
end	End date for the course	End date for the course	
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	Information about a special oriented subject plan.	
schoolname	School name	School name	
continues	Indicates if the course continues		Yes
courselevel	Level		Yes
coursepoints	Course point		Yes
coursegoal	Course goal		Yes
subjectcode	School subject code. For m	School subject code. For more information see www.skolverket.se	



Name	Description		Read- only
status	Status for the course active break applied	Indicates that the course is active or complete Indicates that the course is on break Indicate course is applied or searched	Yes
statustext	Status text of the course		Yes
statusextrainfo	Status extra information of the course		Yes
coursepackage	Course package name		Yes

## 3.3.4 Student

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

# 3.3.5 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

# 3.3.6 Program

Name	Description		Read-only
code	Program code		Yes
name	Program name		Yes
nameinenglish	Program name in English		Yes
type	Program type None VocationalProgram UniversityPreparing IntroductionProgram	No program type Vocational program University preparing pro Introduction program	Yes
orientation	Program orientation/specialization		Yes
orientationinenglish	Program orientation/specialization in English		Yes

No.

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Name	Description		Read-only
extent	The program extent for the student.		Yes
	Complete	Indicates that the progra extent is complete for the student	
	Reduced	Indicates that the progra	
	Extended	Indicates that the progra extended for the studen	
individuallytailored	Indicates if the program is individually tailored		Yes
profilecode	Program profile code		Yes
profilename	Program profile name		Yes
vocationaloutcomecode	Vocational outcome code. Only set for programs with vocational outcome.		Yes
vocationaloutcomename	Vocational outcome name. Only set for programs with vocational outcome.		Yes
vocationaloutcomenameinenglish	Vocational outcome name in english. Only set for programs with vocational outcome.		Yes

## 3.3.7 Note

Name	Description	Read-only
motivation	Motivation note	Yes
motivationcounselling	Student counselling note	Yes
educationgoal	Education goal note	Yes
other	Other note	Yes
studyplan	Note from studyplan.	Yes

# 3.3.8 NoteDetail

Name	Description		Read-only
id	Id of study plan note(GUID)		Yes
type	Type of note. The official values can Administrators can create more note other types than these.  ANTECK_ANS MOTIV_ANS MOTIV_SYV UTBMÅL_ANS ANTECK_ELV		Yes
text	Note description		Yes





Name	Description	Read-only
createdtimestamp	Time stamp when the note was created	Yes
updatetimestamp	Last update time stamp	Yes
updatedby	Signature of person who updated note	Yes

# 3.3.9 Studytime

Name	Description	Read-only
id	Id of study time(GUID)	Yes
previouseducationcode	Last education code	Yes
previouseducationtext	Last education code name	Yes
commentstopreviouseducation	Comment on last education	Yes
currentoccupationcode	Current or last occupation code	Yes
currentoccupationtext	Current or last occupation code name	Yes
occupationdescription	Current or last occupation description	Yes
purposeofeducationcode	Code for purpose of study	Yes
purposeofeducationtext	Name for purpose of study code	Yes
plannedextent	Planned extent	Yes
studypacecode	Study pace code	Yes
studypacetext	Study pace code name	Yes
studyfundingcode	Study funding code	Yes
studyfundingtext	Study funding code name	Yes
startdate	Start date	Yes
enddate	End date	Yes

# 3.3.10 EffortGuidanceAndCounselling

Name	Description	Read-only
questionid	Question id (GUID)	Yes
question	Question	Yes
answer	Answer. Possible vale is yes or no	Yes
answerdate	Date when answer is given	Yes
updatedby	Signature of person who has updated answers	Yes



# 3.3.11 StudyplanRevision

Name	Description	Read-only
id	Study plan revision id (GUID)	Yes
date	Revision date	Yes
changedfrom	Changed from	Yes
changedto	Changed to	Yes
reason	Reason of revision	Yes

# 3.3.12 Placementhistory

Name	Description		Read-only
period	Placement period		Yes
class	Class name		Yes
programcode	Program code		Yes
programname	Program name		Yes
programnameinenglish	Program name in English		Yes
officialprogramcode	Official program code		Yes
officialprogramname	Official program name		Yes
officialprogramnameinengli sh	Official program name in English		Yes
profile	Profile		Yes
officialunitname	Unit name		Yes
mentor	Mentor name		Yes
schoolyears	School year		Yes
extent	The program extent for the student.  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
extenttext	Extent text		Yes
extenttextinenglish	Extent text in English		Yes
branchname	Branch name		Yes
branchnameinenglish	Branch name in English		Yes

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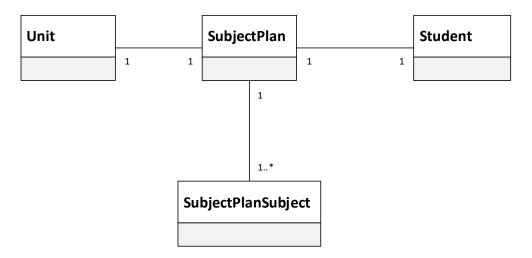
Name	Description	Read-only
officialbranchname	Official branch name	Yes
profiletext	Profile text	Yes
profiletextinenglish	Profile text in English	Yes
startdate	Start date of placement	Yes
enddate	End date of placement	Yes

# 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
nameinenglish	English name for the subject	Yes
language	Language code	Yes



Name	Description		Read-only
type	Type of subject choice		Yes
	StudentChoice	Student choice (not a modern language)	
	StudentChoiceLanguage	Student choice (modern language)	
	LanguageChoice	Language choice (modern language)	
	AlternativeToLanguageChoice	Alternative to language choice	
	MotherTongue	Mother tongue	
	Other	Other type	
schoolyear	School year		Yes
start	Start date for the subject		Yes
end	End date for the subject		Yes
schoolname	School name		Yes
reduced	Type of reduction:		Yes
	None	The subject is not reduced	
	AdaptedStudyRoute	The student studies the	
		subject as an adapted study	
	A 1	route (Anpassad studiegång)	
	AdaptedTimetable	The student studies the	
		subject as an adapted time table (Anpassad tidplan)	
recommendedsubjectcode	Generated scb code for subject		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



# 5 Program choice

# 5.1 Description

This chapter describes the program choice entities and their attributes.

#### 5.2 Domain model

ProgramChoiceProgram		ProgramChoice		Student
	1* 1		1 1	

## 5.3 Entities

# 5.3.1 ProgramChoice

Name	Description	Read-only
student	The student	No
program	Program choice program	No

# 5.3.2 ProgramChoiceProgram

Name	Description	Read-only
code	Program code	No
profilecode	Program profile code	No
vocationaloutcomecode	Vocational outcome code. Only set for programs with vocational outcome.	No
reduced	Student adapted subject	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



#### 6 Course choice

# 6.1 Description

This chapter describes the course choice entities and their attributes.

#### 6.2 Domain model

CourseChoiceCourse			CourseChoice			Student
	1*	1		1	1	

## 6.3 Entities

#### 6.3.1 CourseChoice

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

## 6.3.2 CourseChoiceCourse

Name	Description		Read-only
code	SCB course code		No
type	Course type Orientation ProgramRecess IndividualChoice	Orientation Program recess Individual choice	No
deviation	Deviation from the program. Not so NoDeviation  Added  Removed	of 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
contentinenglish	Information about a course special specialized courses. Not set for the	-	No





Name	Description	Read-only
trialperformed	Indicates that a trial of the course knowledge has been performed.  Not set for the adult school types.	No
hours	Hours for the course	No
group	Group in which the course is studied	No
start	Start date for the course	No
end	End date for the course	No

# 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

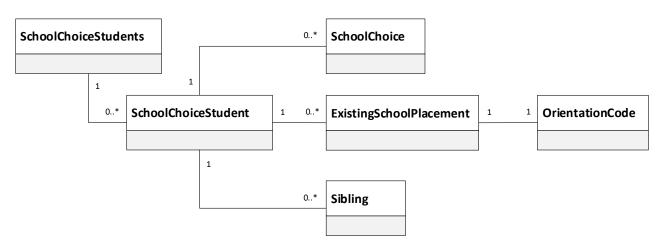
#### 7 School choice

# 7.1 Description

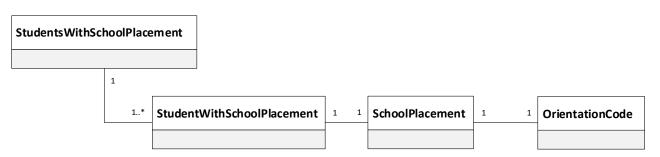
This chapter describes the school choice entities and their attributes.

#### 7.2 Domain model

The export model of the school choice



The import model of the school choice



#### 7.3 Entities

#### 7.3.1 SchoolChoiceStudents

Name	Description	Read-only
schoolchoicestudent	The students with school choices	Yes



## 7.3.2 SchoolChoiceStudent

Name	Description		Read-only
id	The unique identifier for student		Yes
personid	The student		Yes
name	Name of the student		Yes
status	Status of the school choice. It is an enumeration:  Presumptive initial state for school choice SchoolChange initial state for school change Initiated student placed at a suggested school, still updateable through import Placed student updated with a suggested school, cannot be updated through import Unknown status indetermined, cannot be acted upon		Yes
schoolyear	School year for the student		Yes
periodid	The unique identifier for period for actual search		Yes
changeofschool	Indicates if it is a school choice or school change request		Yes
dateforschoolchange	Indicates the date of re	quested school change	Yes
prioritized	Indicates if the		
designatedunit	Id of the school suggested for the student		Yes
schoolchoice	School choices for the student		Yes
schoolplacement	School placements for the student		Yes
sibling	Siblings for the student		Yes

#### 7.3.3 SchoolChoice

Name	Description	Read-only
date	Indicates date when school choice is made	Yes
unitid	The unique identifier for school unit	Yes
orientationcode	Indicates the code for an orientation	Yes
priority	Indicates school choice priority Yes	

# 7.3.4 ExistingSchoolPlacement

Name	Description	Read-only
date	Indicates placement date	Yes



unitid	The unique identifier for school unit	Yes
orientationcode	orientationcode Indicates the code for an orientation	

# 7.3.5 Sibling

Name	Description	Read-only
guid	The unique identifier for sibling	Yes
schoolplacementunit	Indicates the placement unit	Yes
schoolyear	Indicates placement school year	Yes

## 7.3.6 Orientation

Name	Description	Read-only
code	Indicates the code for an orientation	Yes
name	Indicates name of an orientation	Yes

## 7.3.7 StudentsWithSchoolPlacement

Name	Description	Read-only
schoolchoicestudent	schoolchoicestudent Student with suggested school placement	

# 7.3.8 StudentWithSchoolPlacement

Name	Description	Read-only
id	The unique identifier for student	Yes
personid	The student	Yes
name	Name of the student	Yes
schoolplacement	Suggested school placement for student	Yes

## 7.3.9 SchoolPlacement

Name	Description	Read-only
unitid	The unique identifier for school unit	No

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Name	Description	Read-only
date	Date on which placement is created	No
periodid	The unique identifier for period	Yes
schoolyear	Indicated year for which placement is created	Yes
source	Indicates the source of placement	No
orientation	Specialization provided by unit	No

#### 8 Services

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

# 8.1 Study plan

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

#### 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
SearchDate	No	The search date. Current date will be used if SearchDate is not specified

#### 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

## 8.2 Subject plan

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



#### Parameters - Alternative 1:

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

#### Parameters - Alternative 2:

Parameter	Mandatory	Description
SearchDate	No	The search date. Current date will be used if SearchDate is not specified.

#### Services:

Service	Description
GetCompulsorySchoolSubjectplan	Get subject plan for compulsory school student
GetCompulsorySchoolForLearningDisabilitiesSubjectplan	Get subject plan for compulsory school with learning disabilities student

# 8.3 Program choice

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

#### Services:

Service	Description
UpdateUpperSecondarySchooProgramChoice	Update program choice for upper secondary school student
UpdateUpperSecondarySchoolForLearningDisabilitiesProgramChoice	Update program choice for upper secondary school with learning disabilities student

#### 8.4 Course choice

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

#### Services:

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



#### 8.5 School choice

#### 8.5.1 Export

The get service below gives school choices / school changes for students valid at the specified date. The output is XML information according to the XML schema for "schoolchoicestudents" in the Study Information API xsd.

#### Parameters:

Parameter	Mandatory	Description
SearchDate	Yes	A date within the period where to fetch students with school choices and school changes defined

#### Services:

Service	Description
GetCompulsorySchoolSchoolChoiceStudents	Fetch school choices and school changes for compulsory school students

# 8.5.2 Import

The update service will update supplied students with information of the suggested school placements. The input takes XML information according to the XML schema for "schoolplacements" in the Study Information API xsd

#### Services:

Service	Description
UpdateCompulsorySchoolSchoolChoiceStudents	Update the school placements for students with school choices and school changes



# 9 Appendix

## 9.1 References

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

# 9.2 Vocabulary

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

