

Diagrams

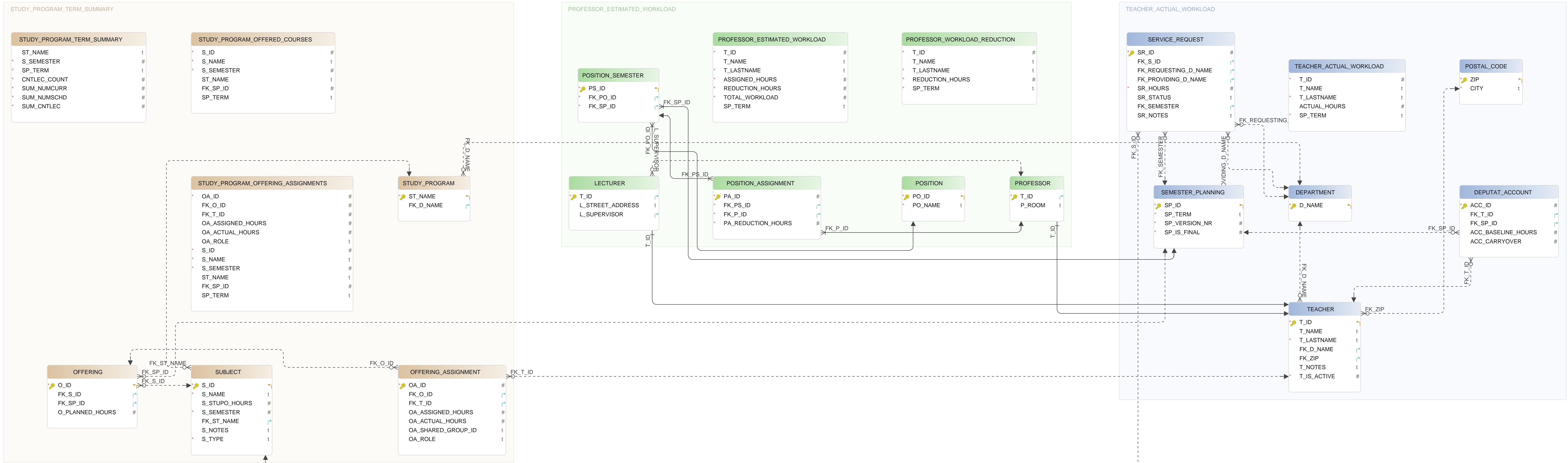
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Main Diagram

Table DEPARTMENT		
Idx	Name	Data Type
* Pk	D_NAME	VARCHAR(100)
Indexes		
Type	Name	On
Pk	SQL260116025206120	D_NAME

Table DEPUTAT_ACCOUNT		
Idx	Name	Data Type
* Pk	ACC_ID	INTEGER
	FK_T_ID	INTEGER
	FK_SP_ID	INTEGER
	ACC_BASELINE_HOURS	DECIMAL(4,2)
	ACC_CARRYOVER	DECIMAL(4,2)
Indexes		
Type	Name	On
Pk	SQL260116025208940	ACC_ID
Foreign Keys		
Type	Name	On
	FK_DEPUTAT_ACCOUNT_SEMESTER_PLANNING (FK_SP_ID) ref SEMESTER_PLANNING (SP_ID)	
	FK_DEPUTAT_ACCOUNT_TEACHER (FK_T_ID) ref TEACHER (T_ID)	

Table LECTURER		
Idx	Name	Data Type
* Pk	T_ID	INTEGER
	L_STREET_ADDRESS	VARCHAR(255)
	L_SUPERVISOR	INTEGER
Indexes		
Type	Name	On
Pk	SQL260116025207670	T_ID
Foreign Keys		
Type	Name	On
	FK_LLECTURER_SUPERVISOR (L_SUPERVISOR) ref PROFESSOR (T_ID)	
	FK_LLECTURER_TEACHER (T_ID) ref TEACHER (T_ID)	

Table OFFERING		
Idx	Name	Data Type
* Pk	O_ID	INTEGER
	FK_S_ID	INTEGER
	FK_SP_ID	INTEGER
	O_PLANNED_HOURS	INTEGER
Indexes		
Type	Name	On
Pk	SQL260116025208400	O_ID
Foreign Keys		
Type	Name	On
	FK_OFFERING_SEMESTER_PLANNING (FK_SP_ID) ref SEMESTER_PLANNING (SP_ID)	
	FK_OFFERING_SUBJECT (FK_S_ID) ref SUBJECT (S_ID)	

Table OFFERING_ASSIGNMENT

Idx	Name	Data Type
* Pk	OA_ID	INTEGER
	FK_O_ID	INTEGER
	FK_T_ID	INTEGER
	OA_ASSIGNED_HOURS	DECIMAL(4,2)
	OA_ACTUAL_HOURS	DECIMAL(4,2)
	OA_SHARED_GROUP_ID	VARCHAR(255)
	OA_ROLE	VARCHAR(50)

Indexes

Type	Name	On
Pk	SQL260116025208670	OA_ID

Foreign Keys

Type	Name	On
	FK_OFFERING_ASSIGNMENT_OFFERING (FK_O_ID) ref OFFERING (O_ID)	
	FK_OFFERING_ASSIGNMENT_TEACHER (FK_T_ID) ref TEACHER (T_ID)	

Table POSITION

Idx	Name	Data Type
* Pk	PO_ID	INTEGER
*	PO_NAME	VARCHAR(100)

Indexes

Type	Name	On
Pk	SQL260116025206910	PO_ID

Table POSITION_ASSIGNMENT

Idx	Name	Data Type
* Pk	PA_ID	INTEGER
*	FK_PS_ID	INTEGER
*	FK_P_ID	INTEGER
*	PA_REDUCTION_HOURS	DECIMAL(4,2)

Indexes

Type	Name	On
Pk	SQL260116025209750	PA_ID

Foreign Keys

Type	Name	On
	FK_POSITION_ASSIGNMENT_POSITION_SEMESTER (FK_PS_ID) ref POSITION_SEMESTER (PS_ID)	
	FK_POSITION_ASSIGNMENT_PROFESSOR (FK_P_ID) ref PROFESSOR (T_ID)	

Table POSITION_SEMESTER

Idx	Name	Data Type
* Pk	PS_ID	INTEGER
*	FK_PO_ID	INTEGER
*	FK_SP_ID	INTEGER

Indexes

Type	Name	On
Pk	SQL260116025209490	PS_ID

Foreign Keys

Type	Name	On
	FK_POSITION_SEMESTER_POSITION (FK_PO_ID) ref POSITION (PO_ID)	
	FK_POSITION_SEMESTER_SEMESTER_PLANNING (FK_SP_ID) ref SEMESTER_PLANNING (SP_ID)	

Table POSTAL_CODE

Idx	Name	Data Type
* Pk	ZIP	VARCHAR(10)
*	CITY	VARCHAR(100)
Indexes		
Type	Name	On
Pk	SQL260116025206450	ZIP

Table PROFESSOR

Idx	Name	Data Type
* Pk	T_ID	INTEGER
	P_ROOM	VARCHAR(50)
Indexes		
Type	Name	On
Pk	SQL260116025207420	T_ID
Foreign Keys		
Type	Name	On
	FK_PROFESSOR_TEACHER (T_ID) ref TEACHER (T_ID)	

Table SEMESTER_PLANNING

Idx	Name	Data Type
* Pk	SP_ID	INTEGER
*	SP_TERM	VARCHAR(20)
*	SP_VERSION_NR	INTEGER
*	SP_IS_FINAL	SMALLINT
Indexes		
Type	Name	On
Pk	SQL260116025206680	SP_ID

Table SERVICE_REQUEST

Idx	Name	Data Type
* Pk	SR_ID	INTEGER
	FK_S_ID	INTEGER
	FK_REQUESTING_D_NAME	VARCHAR(100)
	FK_PROVIDING_D_NAME	VARCHAR(100)
*	SR_HOURS	DECIMAL(4,2)
	SR_STATUS	VARCHAR(50)
	FK_SEMESTER	INTEGER
	SR_NOTES	VARCHAR(100)
Indexes		
Type	Name	On
Pk	SQL260116025209210	SR_ID
Foreign Keys		
Type	Name	On
	FK_SERVICE_REQUEST_PROVIDING_DEPT (FK_PROVIDING_D_NAME) ref DEPARTMENT (D_NAME)	
	FK_SERVICE_REQUEST_REQUESTING_DEPT (FK_REQUESTING_D_NAME) ref DEPARTMENT (D_NAME)	
	FK_SERVICE_REQUEST_SEMESTER_PLANNING (FK_SEMESTER) ref SEMESTER_PLANNING (SP_ID)	
	FK_SERVICE_REQUEST_SUBJECT (FK_S_ID) ref SUBJECT (S_ID)	

Table STUDY_PROGRAM

Idx	Name	Data Type
* Pk	ST_NAME	VARCHAR(100)

Table STUDY_PROGRAM		
	FK_D_NAME	VARCHAR(100)
Indexes		
Type	Name	On
Pk	SQL260116025207920	ST_NAME
Foreign Keys		
Type	Name	On
	FK_STUDY_PROGRAM_DEPARTMENT (FK_D_NAME) ref DEPARTMENT (D_NAME)	

Table SUBJECT		
Idx	Name	Data Type
* Pk	S_ID	INTEGER
*	S_NAME	VARCHAR(255)
	S_STUPO_HOURS	DECIMAL(4,2)
*	S_SEMESTER	INTEGER
	FK_ST_NAME	VARCHAR(100)
	S_NOTES	VARCHAR(100)
*	S_TYPE	VARCHAR(1)
Indexes		
Type	Name	On
Pk	SQL260116025208160	S_ID
Foreign Keys		
Type	Name	On
	FK_SUBJECT_STUDY_PROGRAM (FK_ST_NAME) ref STUDY_PROGRAM (ST_NAME)	

Table TEACHER		
Idx	Name	Data Type
* Pk	T_ID	INTEGER
	T_NAME	VARCHAR(100)
*	T_LASTNAME	VARCHAR(100)
	FK_D_NAME	VARCHAR(100)
	FK_ZIP	VARCHAR(10)
	T_NOTES	VARCHAR(100)
*	T_IS_ACTIVE	SMALLINT
Indexes		
Type	Name	On
Pk	SQL260116025207150	T_ID
Foreign Keys		
Type	Name	On
	FK_TEACHER_DEPARTMENT (FK_D_NAME) ref DEPARTMENT (D_NAME)	
	FK_TEACHER_POSTAL_CODE (FK_ZIP) ref POSTAL_CODE (ZIP)	

View PROFESSOR_ESTIMATED_WORKLOAD

```
CREATE VIEW ${nameWithSchemaName} AS WITH OA_DEDUP AS ( SELECT T.T_ID, SP.SP_TERM, CASE WHEN
OA.OA_SHARED_GROUP_ID IS NULL THEN OA.OA_ASSIGNED_HOURS WHEN ROW_NUMBER() OVER ( PARTITION BY
T.T_ID, SP.SP_TERM, OA.OA_SHARED_GROUP_ID ORDER BY OA.OA_ID ) = 1 THEN OA.OA_ASSIGNED_HOURS ELSE 0 END
AS ASSIGNED_HOURS FROM PLANNING_TOOL.TEACHER T JOIN PLANNING_TOOL.OFFERING_ASSIGNMENT OA ON
OA.FK_T_ID = T.T_ID JOIN PLANNING_TOOL.OFFERING O ON O.O_ID = OA.FK_O_ID JOIN
PLANNING_TOOL.SEMESTER_PLANNING SP ON SP.SP_ID = O.FK_SP_ID ), OA_SUM AS ( SELECT T_ID, SP_TERM,
COALESCE(SUM(ASSIGNED_HOURS), 0) AS ASSIGNED_HOURS FROM OA_DEDUP GROUP BY T_ID, SP_TERM ), PA_SUM AS
( SELECT PA.FK_P_ID AS T_ID, SP.SP_TERM, COALESCE(SUM(PA.PA_REDUCTION_HOURS), 0) AS REDUCTION_HOURS
FROM PLANNING_TOOL.POSITION_ASSIGNMENT PA JOIN PLANNING_TOOL.POSITION_SEMESTER PS ON PS.PS_ID =
PA.FK_PS_ID JOIN PLANNING_TOOL.SEMESTER_PLANNING SP ON SP.SP_ID = PS.FK_SP_ID GROUP BY PA.FK_P_ID,
SP.SP_TERM ), TERM_SUM AS ( SELECT COALESCE(OA.T_ID, PA.T_ID) AS T_ID, COALESCE(OA.SP_TERM, PA.SP_TERM) AS
SP_TERM, COALESCE(OA.ASSIGNED_HOURS, 0) AS ASSIGNED_HOURS, COALESCE(PA.REDUCTION_HOURS, 0) AS
REDUCTION_HOURS FROM OA_SUM OA FULL OUTER JOIN PA_SUM PA ON OA.T_ID = PA.T_ID AND OA.SP_TERM =
PA.SP_TERM ) SELECT T.T_ID, T.T_NAME, T.T_LASTNAME, COALESCE(TERM_SUM.ASSIGNED_HOURS, 0) AS
ASSIGNED_HOURS, COALESCE(TERM_SUM.REDUCTION_HOURS, 0) AS REDUCTION_HOURS,
COALESCE(TERM_SUM.ASSIGNED_HOURS, 0) + COALESCE(TERM_SUM.REDUCTION_HOURS, 0) AS TOTAL_WORKLOAD,
TERM_SUM.SP_TERM FROM PLANNING_TOOL.TEACHER T LEFT JOIN TERM_SUM ON TERM_SUM.T_ID = T.T_ID
```

View PROFESSOR_WORKLOAD_REDUCTION

```
CREATE VIEW ${nameWithSchemaName} AS SELECT T.T_ID, T.T_NAME, T.T_LASTNAME,
COALESCE(SUM(PA.PA_REDUCTION_HOURS), 0) AS REDUCTION_HOURS, SP.SP_TERM FROM
PLANNING_TOOL.PROFESSOR P JOIN PLANNING_TOOL.TEACHER T ON T.T_ID = P.T_ID JOIN
PLANNING_TOOL.POSITION_ASSIGNMENT PA ON PA.FK_P_ID = T.T_ID JOIN PLANNING_TOOL.POSITION_SEMESTER PS ON
PS.PS_ID = PA.FK_PS_ID JOIN PLANNING_TOOL.SEMESTER_PLANNING SP ON SP.SP_ID = PS.FK_SP_ID GROUP BY T.T_ID,
T.T_NAME, T.T_LASTNAME, SP.SP_TERM
```

View STUDY_PROGRAM_OFFERED_COURSES

```
CREATE VIEW ${nameWithSchemaName} AS SELECT S.S_ID, S.S_NAME, S.S_SEMESTER, SP.ST_NAME, O.FK_SP_ID,
SEM.SP_TERM FROM PLANNING_TOOL.OFFERING O JOIN PLANNING_TOOL.SUBJECT S ON S.S_ID = O.FK_S_ID LEFT JOIN
PLANNING_TOOL.STUDY_PROGRAM SP ON SP.ST_NAME = S.FK_ST_NAME LEFT JOIN
PLANNING_TOOL.SEMESTER_PLANNING SEM ON SEM.SP_ID = O.FK_SP_ID
```

View STUDY_PROGRAM_OFFERING_ASSIGNMENTS

```
CREATE VIEW ${nameWithSchemaName} AS SELECT OA.OA_ID, OA.FK_O_ID, OA.FK_T_ID, OA.OA_ASSIGNED_HOURS,
OA.OA_ACTUAL_HOURS, OA.OA_ROLE, S.S_ID, S.S_NAME, S.S_SEMESTER, SP.ST_NAME, O.FK_SP_ID, SEM.SP_TERM
FROM PLANNING_TOOL.OFFERING_ASSIGNMENT OA JOIN PLANNING_TOOL.OFFERING O ON O.O_ID = OA.FK_O_ID JOIN
PLANNING_TOOL.SUBJECT S ON S.S_ID = O.FK_S_ID LEFT JOIN PLANNING_TOOL.STUDY_PROGRAM SP ON SP.ST_NAME =
S.FK_ST_NAME LEFT JOIN PLANNING_TOOL.SEMESTER_PLANNING SEM ON SEM.SP_ID = O.FK_SP_ID
```

View STUDY_PROGRAM_TERM_SUMMARY

```
CREATE VIEW ${nameWithSchemaName} AS SELECT S.FK_ST_NAME AS ST_NAME, S.S_SEMESTER, SP.SP_TERM,
COUNT(OA.OA_ASSIGNED_HOURS) AS CNTLEC_COUNT, COALESCE(SUM(S.S_STUPO_HOURS), 0) AS SUM_NUMCURR,
COALESCE(SUM(OA.OA_ACTUAL_HOURS), 0) AS SUM_NUMSCHD, COALESCE(SUM(OA.OA_ASSIGNED_HOURS), 0) AS
SUM_CNTLEC FROM PLANNING_TOOL.OFFERING_ASSIGNMENT OA JOIN PLANNING_TOOL.OFFERING O ON O.O_ID =
OA.FK_O_ID JOIN PLANNING_TOOL.SUBJECT S ON S.S_ID = O.FK_S_ID JOIN PLANNING_TOOL.SEMESTER_PLANNING SP
ON SP.SP_ID = O.FK_SP_ID GROUP BY S.FK_ST_NAME, S.S_SEMESTER, SP.SP_TERM
```

View TEACHER_ACTUAL_WORKLOAD

```
CREATE VIEW ${nameWithSchemaName} AS SELECT T.T_ID, T.T_NAME, T.T_LASTNAME, SUM(W.WORKLOAD_HOURS) AS
ACTUAL_HOURS, W.SP_TERM FROM PLANNING_TOOL.TEACHER T JOIN ( SELECT OA.FK_T_ID AS T_ID, SP.SP_TERM AS
SP_TERM, COALESCE(SUM(OA.OA_ASSIGNED_HOURS), 0) AS WORKLOAD_HOURS FROM
PLANNING_TOOL.OFFERING_ASSIGNMENT OA JOIN PLANNING_TOOL.OFFERING O ON O.O_ID = OA.FK_O_ID JOIN
PLANNING_TOOL.SEMESTER_PLANNING SP ON SP.SP_ID = O.FK_SP_ID GROUP BY OA.FK_T_ID, SP.SP_TERM UNION ALL
SELECT PA.FK_P_ID AS T_ID, SP.SP_TERM AS SP_TERM, COALESCE(SUM(PA.PA_REDUCTION_HOURS), 0) AS
WORKLOAD_HOURS FROM PLANNING_TOOL.POSITION_ASSIGNMENT PA JOIN PLANNING_TOOL.POSITION_SEMESTER PS
ON PS.PS_ID = PA.FK_PS_ID JOIN PLANNING_TOOL.SEMESTER_PLANNING SP ON SP.SP_ID = PS.FK_SP_ID GROUP BY
PA.FK_P_ID, SP.SP_TERM ) W ON W.T_ID = T.T_ID GROUP BY T.T_ID, T.T_NAME, T.T_LASTNAME, W.SP_TERM
```