

## University Degree Program - SQLServer Query Result

```
CREATE VIEW dim_programwise_course_types AS
SELECT di.ProgramName, dim."Course Name", dim.CourseType
FROM dim_program di, dim_courses dim
WHERE dim.ProgramIDSK = di.ProgramIDSK AND
dim.DepartmentIDSK = di.DepartmentIDSK AND
dim.CollegeIDSK = di.CollegeIDSK ;
```

The screenshot displays the Microsoft SQL Server Enterprise Manager interface. The left pane shows the 'Object Explorer' with a tree view of the database structure, including tables, views, and external resources. The right pane shows the 'Query Editor' with a SQL query and its results.

The query in the Query Editor is:

```
--What are the core requirements and elective courses for these programs
CREATE VIEW dim_programwise_course_types AS
SELECT di.ProgramName, dim."Course Name", dim.CourseType
FROM dim_program di, dim_courses dim
WHERE dim.ProgramIDSK = di.ProgramIDSK AND
dim.DepartmentIDSK = di.DepartmentIDSK AND
dim.CollegeIDSK = di.CollegeIDSK
;

SELECT * FROM dim_programwise_course_types;
```

The results pane shows a table with 20 rows and 3 columns: ProgramName, Course Name, and CourseType. The data is as follows:

ProgramName	Course Name	CourseType
Information Systems	AED	Core
Information Systems	DMDD	Elective
Information Systems	DWBI	Elective
Data Architecture and Management	ADM	Elective
Data Architecture and Management	DSMT	Elective
Data Architecture and Management	DAE	Elective
Data Architecture and Management	AED	Core
Project Management	DMDD	Elective
Data Analytics	DWBI	Elective
Data Analytics	ADM	Elective
Data Analytics	DSMT	Elective
CSYE	DAE	Elective
Computer Science	AED	Core
Computer Science	DMDD	Elective
Computer Science	DWBI	Elective
Data Science	ADM	Elective
Econmincs	DSMT	Elective
Energy Systems	DAE	Elective
Engineering Management	AED	Core
Engineering Management	DMDD	Elective

```

CREATE VIEW [dim_semester_wise_courses_and_grades] AS
SELECT fa.SemesterSK, dim.StudentID, dim.[Student Name], di.CourseNo, fa.Section,
di.[Course Name], di.Credits, fa.GPA
FROM fact_course_registration fa, dim_courses di, dim_students dim
WHERE fa.ProgramIDSK = di.ProgramIDSK AND fa.DepartmentIDSK = di.DepartmentIDSK AND
fa.CollegeIDSK = di.CollegeIDSK AND fa.CourseNoSK = di.CourseNoSK AND fa.StudentSk =
dim.StudentSk ;

```

The screenshot shows the SQL Server Enterprise Manager interface. The left pane displays the 'Object Explorer' with a tree view of the database schema, including tables, views, and external resources. The right pane shows a query window titled 'GraduateStudent-S.t (MS)shimp (71)\*' with a SQL query and its results.

The query in the window is:

```

SELECT * FROM dim_programwise_course_types;

-----What classes (course & section) did students complete in a semester & what were their grades ADD COURSE No
-----What were the classes taught each semester
CREATE VIEW [dim_semester_wise_courses_and_grades] AS
SELECT fa.SemesterSK, dim.StudentID, dim.[Student Name], di.CourseNo, fa.Section, di.[Course Name], di.Credits, fa.GPA
FROM fact_course_registration fa, dim_courses di, dim_students dim
WHERE fa.ProgramIDSK = di.ProgramIDSK AND fa.DepartmentIDSK = di.DepartmentIDSK AND fa.CollegeIDSK = di.CollegeIDSK AND fa.CourseNoSK = di.CourseNoSK AND fa.StudentSk = dim.StudentSk ;

```

The results pane shows a table with 20 rows and 8 columns: SemesterSK, StudentID, Student Name, CourseNo, Section, Course Name, Credits, and GPA. The data is as follows:

SemesterSK	StudentID	Student Name	CourseNo	Section	Course Name	Credits	GPA	
1	5001	701	Ajinkya	1302	1	AED	4	4
2	5001	703	Mrunal	4130	2	DMDO	4	3
3	5002	705	Sumit	4817	3	DWBI	4	3
4	5002	707	Arjun	4248	4	ADM	4	4
5	5003	709	Ikshat	5540	1	DSMT	4	3
6	5003	711	Adi	7532	2	DAE	4	4
7	5004	713	Alia	2004	3	AED	4	3
8	5004	715	John	5373	4	DMDO	4	3
9	5005	717	Mia	6984	1	DWBI	4	4
10	5005	719	Abdullah	3515	2	ADM	4	3
11	5006	701	Ajinkya	3440	3	DSMT	4	3
12	5006	703	Mrunal	8010	4	DAE	4	3
13	5007	705	Sumit	1381	1	AED	4	4
14	5007	707	Arjun	7190	2	DMDO	4	3
15	5008	709	Ikshat	6834	3	DWBI	4	3
16	5008	711	Adi	8033	4	ADM	4	4
17	5009	701	Ajinkya	5038	1	DSMT	4	4
18	5009	702	Mohit	2008	2	DAE	4	3
19	5010	703	Mrunal	2315	3	AED	4	3
20	5010	704	Sanket	2530	4	DMDO	4	4

```

CREATE VIEW dim_course_info AS
SELECT dim_."Semester Name", dim.CourseNo, dim."Course Name", fa."Teacher Name",
dim_e.FullDateAK EnrollmentDate, dim_d.FullDateAK DropDate
FROM dim_teachers fa, dim_semester dim_, fact_course_registration fac, dim_courses dim,
dim_date dim_e, dim_date dim_d
WHERE fac.SemesterSK = dim_.SemesterSK AND fac.TeachersSK = fa.TeachersSK AND
fac.ProgramIDSK = dim.ProgramIDSK AND fac.DepartmentIDSK = dim.DepartmentIDSK AND
fac.CollegeIDSK = dim.CollegeIDSK AND fac.CourseNoSK = dim.CourseNoSK AND
dim_.EnrollmentDateSK = dim_e.DateSK AND dim_.DropDateSK = dim_d.DateSK;

```

The screenshot shows the SQL Server Enterprise Manager interface. The left pane displays the 'Object Explorer' with a tree view of the database schema. The right pane shows the 'Query Results' window with the following data:

Semester Name	CourseNo	Course Name	Teacher Name	EnrollmentDate	DropDate
Fall2020	1302	AED	Nick	2012-09-02	2007-08-19
Fall2020	4130	DMDD	Liam	2012-09-02	2007-08-19
SummerFall2020	5540	DSMT	William	2006-08-03	2007-05-27
SummerFall2020	7932	DAE	Eliph	2006-08-03	2007-05-27
Summer2_2020	6984	DWBI	Nick	2015-01-11	2013-03-28
Summer2_2020	3515	ADM	Nick	2015-01-11	2013-03-28
Spring2021	1381	AED	Oliver	2007-01-27	2012-02-26
Spring2021	7190	CMDD	William	2007-01-27	2012-02-26
Summer1_2021	5038	DSMT	Noah	2014-08-18	2001-01-22
Summer1_2021	2008	DAE	Oliver	2014-08-18	2001-01-22

```

CREATE VIEW dim_teacher_info AS
SELECT dim_."Semester Name", dim.ProgramName, di.TeacherID, di."Teacher Name", di."Email ID"
FROM dim_teachers di, fact_course_registration fa, dim_program dim, dim_semester dim_
WHERE fa.TeachersSK = di.TeachersSK
AND fa.SemesterSK = dim_.SemesterSK;

```

The screenshot shows the SQL Server Enterprise Manager interface. The left pane displays the 'Object Explorer' with a tree view of the database schema. The right pane shows the 'Query Results' window with the following data:

Semester Name	ProgramName	TeacherID	Teacher Name	Email ID
Fall2020	Information Systems	101	Nick	a@b.c
Fall2020	Data Architecture and Management	101	Nick	a@b.c
Fall2020	Project Management	101	Nick	a@b.c
Fall2020	Data Analytics	101	Nick	a@b.c
Fall2020	CSYE	101	Nick	a@b.c
Fall2020	Computer Science	101	Nick	a@b.c
Fall2020	Data Science	101	Nick	a@b.c
Fall2020	Economics	101	Nick	a@b.c
Fall2020	Energy Systems	101	Nick	a@b.c
Fall2020	Engineering Management	101	Nick	a@b.c
Fall2020	Cloud Architecture	101	Nick	a@b.c
Fall2020	Construction Management	101	Nick	a@b.c
Fall2020	Town Planning	101	Nick	a@b.c
Fall2020	Home Science	101	Nick	a@b.c
Fall2020	Information Systems	101	Nick	a@b.c
Fall2020	MS	101	Nick	a@b.c
Fall2020	MBBS	101	Nick	a@b.c
Fall2020	BPharm	101	Nick	a@b.c
Fall2020	BHMS	101	Nick	a@b.c
Fall2020	MD	101	Nick	a@b.c
Fall2020	Information Systems	102	Liam	a@b.c
Fall2020	Data Architecture and Management	102	Liam	a@b.c

```

SELECT dim_c.ProgramIDSK, dim.ProgramName, di."Student Name", di."Email ID", di."Housing
Type", dim_.FullDateAK, dim_g.City, dim_g.State, dim_g.Country
FROM dim_students di, fact_course_registration fa, dim_program dim, dim_date dim_,
dim_geography dim_g, dim_courses dim_c
WHERE fa.StudentSK = di.StudentSK
AND di.StudentBirthDateSK = dim_.DateSK AND di.StudentGeographicSK = dim_g.GeoSK
AND dim_c.ProgramIDSK = dim.ProgramIDSK AND dim_c.DepartmentIDSK = dim.DepartmentIDSK
AND dim_c.CollegeIDSK = dim.CollegeIDSK AND fa.ProgramIDSK = dim_c.ProgramIDSK AND
fa.DepartmentIDSK = dim_c.DepartmentIDSK
AND fa.CollegeIDSK = dim_c.CollegeIDSK AND fa.CourseNoSK = dim_c.CourseNoSK
AND di.Flag=1 ;

```

The screenshot shows the SQL Server Enterprise Manager interface. The left pane displays the 'Object Explorer' with a tree view of the database schema, including tables like 'dim\_students', 'fact\_course\_registration', 'dim\_program', 'dim\_date', 'dim\_geography', and 'dim\_courses'. The right pane shows a query window with the following SQL query:

```

----Who are the students enrolled in a degree program and attributes such as ID, email,
---date of birth (DOB), hometown,
---campus/off-campus address if applicable, etc.
SELECT dim_c.ProgramIDSK, dim.ProgramName, di."Student Name", di."Email ID", di."Housing Type", dim_.FullDateAK, dim_g.City, dim_g.State, dim_g.Country
FROM dim_students di, fact_course_registration fa, dim_program dim, dim_date dim_, dim_geography dim_g, dim_courses dim_c
WHERE fa.StudentSK = di.StudentSK
AND di.StudentBirthDateSK = dim_.DateSK AND di.StudentGeographicSK = dim_g.GeoSK
AND dim_c.ProgramIDSK = dim.ProgramIDSK AND dim_c.DepartmentIDSK = dim.DepartmentIDSK
AND dim_c.CollegeIDSK = dim.CollegeIDSK AND fa.ProgramIDSK = dim_c.ProgramIDSK AND fa.DepartmentIDSK = dim_c.DepartmentIDSK
AND fa.CollegeIDSK = dim_c.CollegeIDSK AND fa.CourseNoSK = dim_c.CourseNoSK
AND di.Flag=1

```

Below the query window, the 'Results' pane displays the output of the query as a table with 6 rows and 9 columns. The columns are: ProgramIDSK, ProgramName, Student Name, Email ID, Housing Type, FullDateAK, City, State, and Country. The data is as follows:

ProgramIDSK	ProgramName	Student Name	Email ID	Housing Type	FullDateAK	City	State	Country
3004	Data Analytics	Ajinkya	ajinkya@b.c.c.	off-campus	2012-09-02	Boston	Massachusetts	USA
3005	CSYE	Mrunal	Click to select the whole column		2006-08-03	Boston	Massachusetts	USA
3006	Computer Science	Sumit	i@q.k	off-campus	2015-01-11	San Francisco	California	USA
3006	Computer Science	Arjun	n@g.s	off-campus	2007-01-27	Amherst	Massachusetts	USA
3006	Computer Science	Ishita	a@b.c	off-campus	2014-08-18	Santa Clara	California	USA
3007	Data Science	Adi	r@m.t	off-campus	2001-01-22	San Diego	California	USA