

Catalog View (3 different entities)

college	department	course_code	course_title	credits
College of Physical Science and Engineering	Computer Information Technology	CIT 111	Intro to Databases	3
College of Business and Communication	Economics	ECON 388	Econometrics	4
College of Business and Communication	Economics	ECON 150	Microeconomics	3
College of Language and Letters	Humanities and Philosophy	HUM 376	Classical Heritage	2

Section View (4 different entities)

year	term	course_code	section_number	faculty_fname	faculty_lname	capacity
2019	Fall	CIT 111	1	Marty	Morring	30
2019	Fall	ECON 150	1	Natalia	Nevarez	50
2019	Fall	ECON 150	2	Natalia	Nevarez	50
2019	Fall	ECON 388	1	Ben	Barrus	35
2019	Fall	HUM 376	1	John	Jensen	30
2018	Winter	CIT 111	2	Marty	Morring	30
2018	Winter	CIT 111	3	Gloria	Garcia	35
2018	Winter	ECON 150	1	Natalia	Nevarez	50
2018	Winter	ECON 150	2	Natalia	Nevarez	50
2018	Winter	HUM 376	1	John	Jensen	30

Student View (1 entity)

first_name	last_name	gender	city	state	birthdate
Paul	Miller	M	Dallas	TX	1996-02-22
Katie	Smith	F	Provo	UT	1995-07-22
Kelly	Jones	F	Provo	UT	1998-06-22
Devon	Merrill	M	Mesa	AZ	2000-07-22
Mandy	Murdock	F	Topeka	KS	1996-11-22
Alece	Adams	F	Rigby	ID	1997-05-22
Bryce	Carlson	M	Bozeman	MT	1997-11-22
Preston	Larsen	M	Decatur	TN	1996-09-22
Julia	Madsen	F	Rexburg	ID	1998-09-22
Susan	Sorensen	F	Mesa	AZ	1998-08-09

Enrollment View (linking table with a two-column composite key)

Alece	enrolled in	CIT 111	Winter 2018	Section 3
Bryce	enrolled in	CIT 111	Winter 2018	Section 2
Bryce	enrolled in	ECON 150	Winter 2018	Section 1
Bryce	enrolled in	HUM 376	Winter 2018	Section 1
Devon	enrolled in	HUM 376	Fall 2019	Section 1
Julia	enrolled in	ECON 150	Winter 2018	Section 2
Katie	enrolled in	ECON 388	Fall 2019	Section 1
Kelly	enrolled in	ECON 388	Fall 2019	Section 1
Mandy	enrolled in	ECON 388	Fall 2019	Section 1
Mandy	enrolled in	HUM 376	Fall 2019	Section 1
Paul	enrolled in	CIT 111	Fall 2019	Section 1
Paul	enrolled in	ECON 150	Fall 2019	Section 2
Preston	enrolled in	ECON 150	Winter 2018	Section 2
Susan	enrolled in	CIT 111	Winter 2018	Section 2

You can use the following SELECT query to check your .sql file. After you complete your .sql file complete with the forward engineering code and the INSERT statements, do the following:

1. Run all the commands in your .sql file by clicking the left lightning bolt icon.
2. Run the following query. You may have to change some of the table names and column names in order to get the query to run without errors.

```
SELECT term_year, term_name, course_code, section_number, faculty_fname, faculty_lname,
capacity
FROM department AS d
      INNER JOIN course AS c ON c.department_id = d. department_id
      INNER JOIN section AS s ON s.course_id = c.course_id
      INNER JOIN faculty AS f ON f.faculty_id = s.faculty_id
      INNER JOIN term AS t ON t.term_id = s.term_id
ORDER BY t.term_id, d.department_id, course_code, section_number;
```

3. Compare the results of the SELECT query with the data in the Section View above. If you completed your ERD and your INSERT statements correctly, the results of the query and the Enrollment View will be the same.
4. Run the following query. You may have to change some of the table names and column names in order to get the query to run without errors.

```
SELECT st.first_name, 'enrolled in', c.course_code,  
       CONCAT(t.term_name, ' ', t.term_year) AS term,  
       CONCAT('Section ', s.section_number) AS section  
FROM student st  
     JOIN enrollment e ON e.student_id = st.student_id  
     JOIN section s ON s.section_id = e.section_id  
     JOIN course c ON c.course_id = s.course_id  
     JOIN term t ON t.term_id = s.term_id  
ORDER BY st.first_name, c.course_code;
```

5. Compare the results of the SELECT query with the data in the Enrollment View above. If you completed your ERD and your INSERT statements correctly, the results of the query and the Enrollment View will be the same.