



The University of Southern Queensland

## Course specification

The current and official versions of the course specifications are available on the web at  
<<http://www.usq.edu.au/coursespecification/current>>.  
Please consult the web for updates that may occur during the year.

### Description: Municipal Services

Subject	Cat-nbr	Class	Term	Mode	Units	Campus
CIV	2702	78389	2, 2008	ONC	1.00	Toowoomba

<b>Academic group:</b>	FOENS
<b>Academic org:</b>	FOES03
<b>Student contribution band:</b>	2
<b>ASCED code:</b>	030909

### STAFFING

Examiner: Vasanthadevi Aravinthan

Moderator: Ron Ayers

### REQUISITES

Pre-requisite: ENV1101

### RATIONALE

Engineering technologists and associates working in the areas of state and local government, and private industry, are often involved with the design and construction of roads, water and wastewater services. It is therefore necessary for these graduates to appreciate the requirements of modern road technology, water supply treatment and distribution, the collection of wastewater and its treatment and disposal.

### SYNOPSIS

Topics covered in this course are road pavement design and construction (including bituminous surfacing techniques), traffic surveys and management, road maintenance, basic water treatment and distribution, and the collection, treatment and disposal of wastewater.

### OBJECTIVES

On completion of this course students will be able to:

1. describe the commonly used methods of urban and rural road construction; (Exam)
2. design road pavements using simple design methods; (Assignment; Exam)
3. apply the methods commonly employed in soil stabilisation; (Exam)
4. integrate knowledge of materials, equipment and processes required to manage and supervise the construction of road pavements and bituminous surfaces; (Exam)
5. design bituminous surfacings for road pavements; (Assignment; Exam)
6. describe the features of commonly used traffic control devices, and design their installation; (Exam)
7. plan and carry out traffic surveys; (Exam)

8. plan and design simple traffic management schemes, parking facilities, and facilities for pedestrians and cyclists; (Exam)
9. assess the requirements for road maintenance techniques; (Exam)
10. describe, examine and design simple water distribution and wastewater collection systems; (Exam)
11. explain the principles and process sequence in water treatment and wastewater treatment plants; (Exam)
12. differentiate and evaluate the processes involved in water and wastewater treatment. (Exam)

## TOPICS

Description	Weighting (%)
1. Road systems and design standards	2.00
2. Rural road construction	2.00
3. Urban road construction	2.00
4. Pavement materials	4.00
5. Pavement design	6.00
6. Soil stabilisation	4.00
7. Pavement construction	3.00
8. Bituminous materials and design of surfacings	14.00
9. Bituminous surfacing practice	6.00
10. Traffic control devices	6.00
11. Street lighting	3.00
12. Traffic studies	6.00
13. Traffic management	3.00
14. Parking design	3.00
15. Facilities for pedestrians and cyclists	4.00
16. Maintenance of roads and streets	4.00
17. Water distribution and wastewater collection	13.00
18. Treatment of water and wastewater	15.00

## TEXT and MATERIALS required to be PURCHASED or ACCESSED

ALL textbooks and materials are available for purchase from USQ BOOKSHOP (unless otherwise stated). Orders may be placed via secure internet, free fax 1800642453, phone 07 46312742 (within Australia), or mail. Overseas students should fax +61 7 46311743, or phone +61 7 46312742. For costs, further details, and internet ordering, use the 'Textbook Search' facility at <http://bookshop.usq.edu.au> click 'Semester', then enter your 'Course Code' (no spaces).

Students are required to purchase or have access to a calculator, which does not have text storage capabilities. (Required for the final examination in this course).

## REFERENCE MATERIALS

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.

Detailed in Introductory Booklet.

## STUDENT WORKLOAD REQUIREMENTS

ACTIVITY	HOURS
Assessments	6.00
Examinations	4.00
Lectures	39.00
Private Study	106.00

## ASSESSMENT DETAILS

Description	Marks out of	Wtg (%)	Due date
ASSIGNMENT	100.00	10.00	08 Sep 2008
2 HR RESTRICT EXAMINATION PT A	500.00	50.00	END S2 (see note 1)
2 HR RESTRICT EXAMINATION PT B	400.00	40.00	END S2 (see note 2)

### NOTES

1. Student Administration will advise students of the dates of their examinations during the semester.
2. Student Administration will advise students of the dates of their examinations during the semester.

## IMPORTANT ASSESSMENT INFORMATION

- 1 Attendance requirements:  
There are no attendance requirements for this course. However, it is the students' responsibility to study all material provided to them or required to be accessed by them to maximise their chance of meeting the objectives of the course and to be informed of course-related activities and administration.
- 2 Requirements for students to complete each assessment item satisfactorily:  
To complete each of the assessment items satisfactorily, students must obtain at least 50% of the marks available (or at least a grade of C-) for each assessment item.
- 3 Penalties for late submission of required work:  
If students submit assignments after the due date without extenuating circumstances then a penalty of 5% of the assigned mark may apply for each working day late up to a maximum of ten working days at which time a mark of zero can be recorded for that assignment.
- 4 Requirements for student to be awarded a passing grade in the course:

- To be assured of receiving a passing grade in a course a student must obtain at least 50% of the total weighted marks for the course.
- 5 Method used to combine assessment results to attain final grade:  
The final grades for students will be assigned on the basis of the weighted aggregate of the marks (or grades) obtained for each of the summative assessment items in the course.
  - 6 Examination information:  
In a Restricted Examination, candidates are allowed access to specific materials during the examination. The only materials that candidates may use in the restricted examination for this course are: writing materials (non-electronic and free from material which could give the student an unfair advantage in the examination); calculators which cannot hold textual information (students must indicate on their examination paper the make and model of any calculator(s) they use during the examination).
  - 7 Examination period when Deferred/Supplementary examinations will be held:  
Any Deferred or Supplementary examinations for this course will be held during the examination period at the end of the semester of the next offering of this course.
  - 8 University Regulations:  
Students should read USQ Regulations 5.1 Definitions, 5.6. Assessment, and 5.10 Academic Misconduct for further information and to avoid actions which might contravene University Regulations. These regulations can be found at the URL <http://www.usq.edu.au/corporateservices/calendar/part5.htm> or in the current USQ Handbook.

## **ASSESSMENT NOTES**

- 1 The due date for an assignment is the date by which a student must despatch the assignment to the USQ. The onus is on the student to provide proof of the despatch date, if requested by the Examiner.
- 2 Students must retain a copy of each item submitted for assessment. This must be despatched to USQ within 24 hours if required by the Examiner.
- 3 In accordance with University's Assignment Extension Policy (Regulation 5.6.1), the examiner of a course may grant an extension of the due date of an assignment in extenuating circumstances.
- 4 The Faculty will normally only accept assessments that have been written, typed or printed on paper-based media.
- 5 The Faculty will NOT accept submission of assignments by facsimile.
- 6 Students who do not have regular access to postal services or who are otherwise disadvantaged by these regulations may be given special consideration. They should contact the examiner of the course to negotiate such special arrangements.
- 7 In the event that a due date for an assignment falls on a local public holiday in their area, such as a Show holiday, the due date for the assignment will be the next day. Students are to note on the assignment cover the date of the public holiday for the Examiner's convenience.
- 8 Students who have undertaken all of the required assessments in a course but who have failed to meet some of the specified objectives of a course within the normally prescribed time may be awarded one of the temporary grades: IM (Incomplete - Make up), IS (Incomplete - Supplementary Examination) or ISM (Incomplete -Supplementary Examination and Make up). A temporary grade will only be awarded when, in the opinion of the examiner, a student will be able to achieve the remaining objectives of the course after a period of non directed personal study.

- 9 Students who, for medical, family/personal, or employment-related reasons, are unable to complete an assignment or to sit for an examination at the scheduled time may apply to defer an assessment in a course. Such a request must be accompanied by appropriate supporting documentation. One of the following temporary grades may be awarded IDS (Incomplete - Deferred Examination; IDM (Incomplete Deferred Make-up); IDB (Incomplete - Both Deferred Examination and Deferred Make-up).

### **OTHER REQUIREMENTS**

- 1 Students will require access to e-mail and internet access to USQConnect for this course.
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