

# COMP90015 Distributed Systems

| <b>Credit Points:</b>                          | 12.50  |                |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |
|--|--|----------------|----------------------------|----------------|--|------------------|-------|-------------------------------------|------------------|-------|---------------------------------|------------------|-------|
| <b>Level:</b>                                  | 9 (Graduate/Postgraduate)  |                |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |
| <b>Dates &amp; Locations:</b>                  | This subject is not offered in 2011.   |                |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |
| <b>Time Commitment:</b>                        | Contact Hours: 24 hours of lectures, 12 hours of tutorial/laboratory classes; Non-contact time commitment: 84 hours Total Time Commitment: Not available   |                |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |
| <b>Prerequisites:</b>                          | <p>The prerequisites are:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>COMP90041 Programming and Software Development</td> <td>Not offered 2011</td> <td>12.50</td> </tr> <tr> <td>COMP90038 Algorithms and Complexity</td> <td>Not offered 2011</td> <td>12.50</td> </tr> <tr> <td>COMP90007 Internet Technologies</td> <td>Not offered 2011</td> <td>12.50</td> </tr> </tbody> </table> <p>OR equivalent subjects.</p>   | Subject        | Study Period Commencement: | Credit Points: | COMP90041 Programming and Software Development | Not offered 2011 | 12.50 | COMP90038 Algorithms and Complexity | Not offered 2011 | 12.50 | COMP90007 Internet Technologies | Not offered 2011 | 12.50 |
| Subject  | Study Period Commencement:   | Credit Points: |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |
| COMP90041 Programming and Software Development | Not offered 2011   | 12.50          |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |
| COMP90038 Algorithms and Complexity            | Not offered 2011   | 12.50          |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |
| COMP90007 Internet Technologies                | Not offered 2011   | 12.50          |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |
| <b>Corequisites:</b>                           | None   |                |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |
| <b>Recommended Background Knowledge:</b>       | None   |                |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |
| <b>Non Allowed Subjects:</b>                   | None   |                |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |
| <b>Core Participation Requirements:</b>        | For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a> |                |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |
| <b>Contact:</b>                                | Dr Adrian Pearce<br>email: <a href="mailto:adrianp@unimelb.edu.au">adrianp@unimelb.edu.au</a> ( <a href="mailto:adrianp@unimelb.edu.au">mailto:adrianp@unimelb.edu.au</a> )  |                |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |
| <b>Subject Overview:</b>                       | Topics covered include: introduction, principles and paradigms, design issues, communication, processes, naming, synchronization, consistency and replication, fault tolerance, and security issues in distributed systems and applications; distributed computing environments and standard toolkits, case studies in distributed systems and applications.   |                |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |
| <b>Objectives:</b>                             | On completion of this subject students should: <ul style="list-style-type: none"> <li># Have an understanding of the principles and paradigms underlying distributed software systems.</li> </ul>  |                |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |
| <b>Assessment:</b>                             | Project work of approx. 36 hours during semester (40%) and a 3-hour written examination (60%). Both components must be completed satisfactorily to pass the subject.   |                |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |
| <b>Prescribed Texts:</b>                       | None   |                |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |
| <b>Breadth Options:</b>                        | This subject is not available as a breadth subject.  |                |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |
| <b>Fees Information:</b>                       | Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>  |                |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |
| <b>Generic Skills:</b>                         | On completion of this subject students should: <ul style="list-style-type: none"> <li># Be able to undertake problem identification, formulation and solution</li> </ul>   |                |                            |                |  |                  |       |                                     |                  |       |                                 |                  |       |

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|  | <ul style="list-style-type: none"><li># Have a capacity for independent critical thought, rational inquiry and self-directed learning; and</li><li># Have a profound respect for truth and intellectual integrity, and for the ethics of scholarship</li></ul> |
| <b>Related Course(s):</b>                          | Bachelor of Computer Science (Honours)<br>Master of Engineering in Distributed Computing<br>Master of Science (Computer Science)<br>Master of Software Systems Engineering<br>Postgraduate Certificate in Engineering  |
| <b>Related Majors/Minors/<br/>Specialisations:</b> | Master of Engineering (Software)   |