

Department of Civil and Structural Engineering

**Reading List for MSc Modules in Groundwater and Water Engineering**

CIV6701 – Hydrogeology				
Title	Author(s), Year	Location	ISBN	Importance
Introducing Groundwater	Price, Michael, 1996		0748743715	Core
Physical and Chemical Hydrogeology	Domenico, Patrick A., Schwartz, Frank, 1997		0471597627	
Applied Hydrogeology	Fetter, C.W., 2001		0131226878	
Urban Groundwater Pollution	Lerner, David N., 2003		9058096297	
Fundamentals of Ground Water	Schwartz, F, Zhang, Hubao, 2003		0471429058	
Hydrogeology - Principles and Practice Instructor's Manual	Hiscock, Kevin, 2005		1405132698	
Groundwater in the Environment - An Introduction	Younger, Paul, 2006		1405121432	
Groundwater Science	Fitts, Charles R., 2002		0122578554	

CIV6710 – Environmental Chemistry				
Title	Author(s), Year	Location	ISBN	Importance
Chemical Calculations at a Glance	Yates, Paul, 2005		1405118717	Core
Fundamentals of environmental chemistry	Manahan, S. E., 2000		156670491X	Core
Geochemistry, Groundwater and Pollution	Appelo, C.A.J and Postma, D., 1999		9054101059	Peripheral
Aquatic Chemistry	Stumm, W, 1981		0471048313	Peripheral
Chemistry	Atkins, 2005		0716742675	Peripheral

CIV6711 – Environmental Microbiology				
Title	Author(s), Year	Location	ISBN	Importance
Groundwater Microbiology and Geochemistry	Chapelle, Francis H, 1993		0471529516	Core
Biology of Microorganisms. - 10th ed	Madigan, Michael T. et al, 2003		0130491470	Secondary

CIV6712 – Field Investigation Methods				
Title	Author(s), Year	Location	ISBN	Importance
Field Hydrogeology	Brassington, R., 1998		0471973475	Core
Groundwater and Wells	Driscoll, F. G., 1998		0961645601	Secondary

CIV6713 – Fate and Transport of Pollutants in Groundwater				
Title	Author(s), Year	Location	ISBN	Importance
Introducing Groundwater	Price, M, 1985		0414285001	Core
Urban Groundwater Pollution	Lerner, David N., 2003		9058096297	Secondary
Groundwater	Freeze, RA & Cherry, JA, 1979		0133653129	Secondary
Applied Hydrogeology	Fetter, C.W., 1994		0023364904	Secondary
Physical and Chemical Hydrogeology	Domenico, Patrick A., Schwartz, Frank, 1998		0471597627	Secondary
Groundwater Recharge	Lerner DN, Issar, A and Simmers I, 1990		392270591x	Peripheral
Groundwater and Wells	Driscoll, F. G., 1986		0961645601	Peripheral
Contaminant Hydrogeology	Fetter, CW, 1999		0137512155	Peripheral

CIV6714 – Risk Assessment for Soil and Groundwater				
Title	Author(s), Year	Location	ISBN	Importance
Methodology for the derivation of remedial targets for soil and groundwater to protect water resources	PA Marsland & MA Carey, 1999	Copies will be provided	1857051963	Core
Risk-based contaminated land investigation and assessment	J. Petts, T. Cairney, M Smith, 1997		0471966088	Secondary
Risk assessment for contaminated sites in Europe, Vol. 2, Policy framework	C. Ferguson and H. Kasamas (eds), 1998	<a href="http://www.lqm.co.uk/lqmpress/lqm_press.html">http://www.lqm.co.uk/lqmpress/lqm_press.html</a>	0953309010	Secondary
Risk assessment for contaminated sites in Europe, Vol. 1, Scientific basis.	C Ferguson and 7 others, 1998	<a href="http://www.lqm.co.uk/lqmpress/lqm_press.html">http://www.lqm.co.uk/lqmpress/lqm_press.html</a>	0953309002	Secondary

CIV6715 – Natural Attenuation of Pollution				
Title	Author(s), Year	Location	ISBN	Importance
Natural Attenuation of Fuels and Chlorinated Solvents in the Subsurface	Wiedemeier, T, 1999		0471194791	Core
Ground Water Contamination: Transport and Remediation	Bedient, P, 1999		0130138401	Core
Ground-water Microbiology and Chemistry	Chapelle, F.H, 1993		0471529516	Secondary
Contaminant Hydrogeology	Fetter, C.W., 1999		0137512155	Peripheral

CIV6716 – Whole life Costing				
Title	Author(s), Year	Location	ISBN	Importance
Whole life costing for water distribution network management	Skipworth, Englehardt, Cashman, Savic, Saul, Walters, 2002		0727731661	Core
Full cost accounting: an agenda for action	Association of Chartered Certified Accountants, 2001		1859083528	Peripheral

CIV6717 – Methods for Water Analysis				
Title	Author(s), Year	Location	ISBN	Importance
Statistics and Chemometrics for Analytical Chemistry	Miller, Jane, Miller James, 2005		0131291920	Core
Environmental Analytical Chemistry	Fifield, F. W. Haines, P. J., 2000		0632053836	Core
Instant notes in Analytical Chemistry	Kealey, D. & Haines, P.J., 2002		1859961894	Secondary

CIV6718 – Design and Performance of Urban Drainage				
Title	Author(s), Year	Location	ISBN	Importance
Modelling Code of Practice	WaPUG, 2003	<a href="http://www.wapug.org.uk">http://www.wapug.org.uk</a>		Core
Urban Pollution Management Update	FWR, 1998		095217121	Core
CSO Design Guide	WaPUG, 2003	<a href="http://www.wapug.org.uk">http://www.wapug.org.uk</a>		Secondary
Urban Drainage	Butler D and Davies J W, 2004		9870415306065	Secondary

CIV6720 – Modelling Water Distribution Networks				
Title	Author(s), Year	Location	ISBN	Importance
Water Supply: 5th Edition	Twort, A.C., Ratnayaka, D.D. and Brandt, M.J., 2000		0340720182	Core
Water distribution modeling	Thomas M. Walski, Donald V. Chase, Dragan A. Savic, 2001		0965758044	Core
An Introduction to Drinking Water Quality	Nicolson, N. J., 1993		187075218x	Secondary
Water Distribution Systems	Brandon, T. W., 1984		0901427136	Peripheral

CIV6721 – Remediation of NAPL pollutants				
Title	Author(s), Year	Location	ISBN	Importance
Evaluating Hydrocarbon Removal from Source Zones and its Effect on Dissolved Plume Longevity and Concentration	Huntley D and Beckett GD, 2002	<a href="http://api-ep.api.org/filelibrary/4715_without_appendicies.pdf">http://api-ep.api.org/filelibrary/4715_without_appendicies.pdf</a> and WebCT	On-line doc	Core – chapters 1 & 2
An Introduction to Characterising Sites Contaminated with DNAPLs	Interstate Technology and Regulatory Council, 2003	<a href="http://www.itrcweb.org/Documents/DNAPLs-4.pdf">http://www.itrcweb.org/Documents/DNAPLs-4.pdf</a> and WebCT	On-line doc	Core
An Illustrated Handbook of DNAPL Transport and Fate in the Subsurface	Keuper BH, Wealthall GP, Smith JWN, Leharne SA and Lerner DN, 2004	<a href="http://publications.environment-agency.gov.uk/pdf/SCHO0604BHIT-e-e.pdf">http://publications.environment-agency.gov.uk/pdf/SCHO0604BHIT-e-e.pdf</a> and WebCT	On-line doc	Core
Dense Chlorinated Solvent and other DNAPLs in Groundwater	Pankow JF, and Cherry JA, 1996	Amazon, eBay purchase, 1 copy held by RDW	95-61690 (Library of Congress Cat Card No)	Supplementary
DNAPL Site Evaluation	Cohen RM and Mercer JW, 1993	St Georges Library	0873719778	Supplementary

CIV6722 – SUDS and Wetlands - Hydrology and Water Quality				
Title	Author(s), Year	Location	ISBN	Importance
Sustainable urban drainage systems: design manual for England and Wales	CIRIA, 2000		0860175227	Core
Constructed wetlands for pollution control: Processes, Performance, Design and Operation	IWA Specialist group on use of macrophytes in water pollution control, 2001		1900222051	Core
Review of the design and management of constructed wetlands	PM Nuttall, AG Boon, MR Rowell, 1997		0860174859	Secondary

CIV6725 – In Situ Groundwater Remediation				
Title	Author(s), Year	Location	ISBN	Importance
In Situ Treatment Technology	Nyer E, 1996, 2001	St Georges Library	1566705282	Supplementary
Ground Water Contamination: Transport and Remediation	Bedient PB, 1999	St Georges Library	0130138401	Supplementary
Natural and Enhanced Remediation Systems	Suthersan S, 2001	St Georges Library	1566702828	Supplementary
Groundwater Remediation	Charbeneau RJ, Bedient PB, Loehr RC editors, 1992	St Georges Library	0877629439	Supplementary
Biodegradation and bioremediation	Alexander M, 1999	St Georges Library	0120498618	Supplementary

CIV6726 – Landfill Engineering and Environmental Management				
Title	Author(s), Year	Location	ISBN	Importance
Solid Waste Landfill engineering and Design	McBean, E.A., Rovers, F.A. & Farquhar, G.J., 1995		0130791873	Core

CIV6771 – Environmental River Processes				
Title	Author(s), Year	Location	ISBN	Importance
River processes - an introduction to fluvial dynamics	Robert, A, 2003		0340763388	Core
River mixing	Rutherford, J.C., 1994		0471942820	Core
Hydraulics in civil and environmental engineering	Chadwick, A and Morfett, J, 1993		0419181601	Secondary

CIV6776 – Sustainable Systems				
Title	Author(s), Year	Location	ISBN	Importance
Sustainable water services: A procedural guide	Ashley R M., Blackwood D J., Butler D., Jowitt P., 2004		1843390655	Core
Balancing water for humans and nature	Falkenmark M., Rockstrom J., 2004		1853839272	Secondary
Sustainable development in practice	Azapagic A., Perdan S., Clift R. (Ed.), 2004		0470856092	Secondary
Sustainability Criteria for Water Resource Systems	Loucks D P., Gladwell J S., 1999		0521560446	Peripheral
Analytical tools for environmental design and management in a systems perspective	Wrisberg N., Udo de Haes H A., Triebswetter U., Eder P., Clift R. (Ed.), 2002		0402006268	Peripheral