

**CONSTRUCTION ENGINEERING DIVISION  
SBLM | FOBE | AY2020/21  
CED BOOKLIST (REQUIRED & RECOMMENDED)**

**Students are NOT required to purchase these books. They are required to source them via online means and/or the use of library resources.**

DIPLOMAS	CODE	NAME OF MODULE	CREDITS	BOOKS	
				REQUIRED	RECOMMENDED
<b>DIPLOMAS (CONSTRUCTION MANAGEMENT/STRUCTURAL ENGINEERING) LEVEL 1</b>					
	COE1009	Workshop	1		
	COE1004	Construction Drawing	3	Miller, Edward J. and Fauseet's, James G. Architectural Drawing and Light Construction.; Prentice Hall Inc. New Jersey	Jefferis, Alan and Madsen, David; Architectural Drafting and Design  Ezeji, S.C. and Nwoke, G.I. Technical Drawing 3, Building Drawing Longman Int.
	COE1010	Introduction to Material Science	2		
	COT1012	Materials Laboratory 1	2	UTECH/CED Materials Laboratory Manual	Engineerig Properties of Soils and their Measurement, Joseph Bowles  American Society for Testing and Materials, Vol. 04 Book of Standards Properties of Concrete, A.M. Neville
	COT1010	Structural Mechanics	3	Durka, F. Morgan, W. and Williams, DT. "Structural Mechancis: Loads, Analysis, Design and materials". Prentice Hall	Introduction to Structural Mechanics SI Edition - by Reynolds, Kent & Lazenby  Strength of Materials - by Nesh  Solution to problems in Strength of Materials - by Urry
	COE1012	Introduction to Construction Methods	2	Seeley, I. H. Building Technology. London: The Macmillan Press.	Foster, J. S. and Harrington, R. Structure and Fabric. Part 1 (5th ed.). Essex, England: Longman Scientific and Technical.  Chudley, R. Building Construction Handbook. Jordan Hill, Oxford: Laxton's  Ching, F. D. K. and Adams, C.. Building Construction Illustrated. New York: Van Nostrand Reinhold.
	COE1005	Introduction to Computer Aided Design and	3		
<b>DIPLOMAS (CONSTRUCTION MANAGEMENT/STRUCTURAL ENGINEERING) LEVEL 2</b>					
	COE3034	Computer Aided Design and Drafting	3		
	QUS3003	Estimating	3	Chris Wilcox "Measurements of Construction	
	QUS1001	Measurements of Building Works 1	3	Chris Wilcox "Measurements of Construction	
	COE2021	Material Science	2	Civil Engineering Materials - - by Neil Jackson	Materials for Civil & Highway Engineering
	COE2007	Structures 1	3	Norris, C.H. & Wilbur J.B., "Elementary	Norris, C.H. & Wilbur J.B., "Elementary
	COE2018	Building Services	3		
	COE2019	Construction Methods	3		Barry R. "Construction of Buildings". Vols 1
	COE2020	Construction Administration for the Built	3	Turner: "Building Contracts" Godwin	
	COT2011	Materials Laboratory 2	2	UTECH/CED Materials Laboratory Manual	Engineering Properties of Soils and their
	SGI1014	Introduction to Land Surveying	3		Schofield, W. "Engineering Surveying"
<b>DIPLOMA IN CONSTRUCTION MANAGEMENT LEVEL 3 CORE</b>					
	COE3009	Measurements	3		
	COE3031	Construction Methods & Systems	3	Stroud Foster et al – Mitchells Building	
	COE3032	Construction Management and Operations	3		
	CIE3001	Civil Engineering 1	3	R. Holmes: Introduction to Civil Engineering	
	COE3033	Construction Project Monitoring	2		
	COE3008	Site Surveying	4	Kavanagh, B. & Glen-Bird S.J. (1996)	
	COT3011	Materials Laboratory 3	2	UTECH/CED Materials Laboratory Manual	Engineerig Properties of Soils and their Measurement, Joseph Bowles  American Society for Testing and Materials, Vol. 04 Book of Standards  Properties of Concrete, A.M. Neville

DIPLOMA IN STRUCTURAL ENGINEERING LEVEL 3 CORE					
	COE3010	Theory of Structures	3	<p>Morley: Theory of Structures</p> <p>Gaylord, E. H. &amp; Gaylord C. N. :Structural Engineers' Handbook</p> <p>Merritt, F.S.: Standard Handbook for Civil Engineers</p> <p>W Fisher, Cassie: Structural Analysis. Longmans</p>	
	COE3003	Soil Mechanics	2	<p>G. N Smith: "Elements of Soil Mechanics B.SP</p> <p>K.Terzaghi:"Soil Mechanics in Engineering Practice"</p> <p>R. Whitlon: "Basic Soil Mechanics"</p> <p>R.F. Craig: Soil Mechanics"</p> <p>M. S. Smith: "Soil Mechanics" Longmans</p>	
	COE3031	Construction Methods & Systems	3	<p>Stroud Foster et al – Mitchells Building Construction series "Structure &amp; Fabric I and II</p> <p>R. Chudley: Building Construction Vols 1-4</p> <p>P. Brett: Formwork &amp; Concrete Practice"</p> <p>Heinemann</p>	
	COE3026	Structures 3A - Design and Detailing	3	<p>Reinforced Concrete, Mechanics &amp; Design, 4e by James A. Macgregor</p>	<p>Reinforced Concrete : A Fundamental Approach, 4e by Dr. Edward G. Naway P.E.</p> <p>Design of Concrete Structures by Winter &amp; Nilson</p> <p>Concrete Design Handbook by Canadian Portland Cement Association</p>
	COE3004	Structures 3B - Design and Detailing	3	<p>Steel Structures, Design &amp; Behavior: Load Resistance Factor Approach, 4e by Charles G. Salmon &amp; John E. Johnson</p> <p>ACI 318-02, Building Code and Commentary</p> <p>AISC LRFD -1999 Manual of Steel Construction</p>	
	COE3008	Site Surveying	4	<p>Schofield, W. "Engineering Surveying"</p> <p>Uren, J. &amp; Price W. "Surveying for Engineers"</p>	
	CIE3001	Civil Engineering 1	3	<p>R. Holmes: Introduction to Civil Engineering Construction</p> <p>□ F. S. Merrit: Standard Handbook for Civil Engineers</p>	
	COE3033	Construction Project Monitoring	2		
	COT3011	Materials Laboratory 3	2	<p>UTECH/CED Materials Laboratory Manual</p>	<p>Engineerig Properties of Soils and their Measurement, Joseph Bowles</p> <p>American Society for Testing and Materials, Vol. 04 Book of Standards</p> <p>Properties of Concrete, A.M. Neville</p>

CODE	NAME OF MODULE	CREDITS	BOOKS	
			REQUIRED	RECOMMENDED
<b>B.ENG CONSTRUCTION ENGINEERING LEVEL 1 CORE</b>				
COT1012	Materials Laboratory 1	2	UTECH/CED Materials Laboratory Manual	Engineerig Properties of Soils and their
COE1004	Construction Drawing	3		
COE1010	Introduction to Material Science	2		
COT1010	Structural Mechanics	3	Durka, F. Morgan, W. and Williams, DT.	Introduction to Structural Mechanics SI
COE1012	Introduction to Construction Methods	2	Chudley, R – Construction Technology	Greeno, R. – Building Construction
<b>B.ENG CONSTRUCTION ENGINEERING LEVEL 2 CORE</b>				
COE1002	Engineering Geology	3	Engineering Geology, an Environmental Approach	
COE1005	Introduction to Computer Aided Design and	3	Kirkpatrick, M. James, The AutoCAD Book:	
COE2007	Structures 1	3		Norris, C.H. & Wilbur J.B., "Elementary
COT2011	Materials Laboratory 2	2	UTECH/CED Materials Laboratory Manual	Engineering Properties of Soils and their
COE2014	Site Surveying	3		Schofield, W. "Engineering Surveying"
COE2019	Construction Methods	3		Barry R. "Construction of Buildings". Vols 1
<b>B.ENG CONSTRUCTION ENGINEERING LEVEL 3 CORE</b>				
MEE3003	Fluid Mechanics	3		
MEE2017	Thermal Fluid Science Lab 1	2		
COE3010	Theory of Structures	4	Morley:	
COE2015	Measurement & Estimating 1	2		
COE3003	Soil Mechanics	2	G. N Smith:	
COE3026	Structures 3A- Design and Detailing	3	Reinforced Concrete, Mechanics & Design, 4e	Reinforced Concrete : A Fundamental Approach,
COE3034	Computer Aided Design and Drafting	3		
CIE3001	Civil Engineering 1	3	R. Holmes: Introduction to Civil Engineering Construction	
COE3004	Structures 3B- Design and Detailing	3	Steel Structures, Design & Behavior: Load Resistance	
COE3005	Services Engineering	2		Stein, Reynolds, McGuiness "Mechanical and
COT3011	Materials Laboratory 3	2		
<b>B.ENG CONSTRUCTION ENGINEERING LEVEL 4 CORE</b>				
COE4001	Structures 4	3	Morley: "Theory of Structures" Gaylord EH & Gaylord CN; "Structural Engineering Hand Book" Merrith. F.S.: "Standard Hand Book for civil Engineers" W. Fisher Cassie:" Structural Analysis" Longmans" "Steel Designers Manual" Crosby Lockland Staples, London AJSP. ppard & J.F. Baker: "The Analysis of Engineering Structures" Arnold, London JJ Tuma: "Theory & Problems of Structural Analysis" McGraw-Hill N.Y	

COE4002	Site Monitoring	1		
COE3031	Construction Methods & Systems	3	Stroud Foster et al – Mitchells Building Construction series "Structure & Fabric I and II  R. Chudley: Building Construction Vols 1-4  P. Brett: Formwork & Concrete Practice" Heinemann	
COE4006	Construction Management	2		Management Techniques applied to Construction Industry; Oakley and Poskitt;  Principles of Construction Management – R. Pilcher  Modern Construction Management – Frank Harris/Ronald McCaffer
COE4015	Professional Practice	2	Turner: "Building Contracts" Godwin  Aqua Group: "Contract Administrative" Crosby Lockwood & Son	
CIE4001	Civil Engineering 2	2	Holmes: "Introduction to Civil Engineering Construction"  F.S. Merrit: "Standard Handbook for Civil Engineering" McGraw-Hill	
COE4005	Structures 5 (Design & Detailing)	3	Design of Wood Structures, 4e by Donald E. Breyer  Timber Construction Manual, 4e by American Institute of Timber Construction  Design of Pre-stressed Concrete by Arthur H. Nilson  Precast and Prestressed Concrete PCI DESIGN HANDBOOK  Reinforced Masonry Engineering Handbook by Masonry Institute of America  Reinforced Concrete, Mechanics & Design, 3e by James A. Macgregor	Steel Structures, Design & Behavior: Load Resistance Factor Approach, 4e by Charles G. Salmon & John E. Johnson  ACI 318-95, Building Code and Commentary  AISC LRFD Manual of Steel Construction  Reinforced Concrete : A Fundamental Approach, 4e by Dr. Edward G. Naway P.E.  Design of Concrete Structures by Winter & Nilson  Concrete Design Handbook by Canadian Portland Cement Association  Structural Steel Designers Handbook by Brockerbrough & Merrit
ENE4001	Environmental Engineering	2	Corbit, Robert A., A standard handbook of Environmental Engineering  Feachin Richard, G. , Environmental Health Engineering in the Tropics  Liu, David F., Environmental Engineering Handbook.	
PRJ4017	Final Project	3	Schloss, P.J. & Maureen Smith. Conducting Research. Merrill/Prentice Hall, (Latest Edition), or appropriate Text.	

<b>CODE</b>	<b>NAME OF MODULE</b>	<b>CREDITS</b>	<b>BOOKS</b>
<b>BACHELORS IN CONSTRUCTION MANAGEMENT LEVEL 4</b>			
			<b>REQUIRED</b>
COE4016	Technology A	2	
COE4026	Project Finance and Development	2	Financial Management: Principles and Applications
COE4027	Financial Management Accounting	3	
RES4007	Research Studies	2	
COE4020	Office Practice	2	Fisk, E. R., (July 2005) Construction Project
COE4004	Professional Practice	2	Fisk, E. R., (July 2005). Construction Project
COE4017	Project Analysis & Evaluation	2	
COE4019	Technology B	2	
COE4023	Construction Law and Contracts	2	Smith & Keenan's LAW FOR BUSINESS, Denis
COE4025	Service Engineering	2	
MAN2001	Organization & Management 1	3	
COE4013	Construction Management in Practice	2	Edwards, R. Fisk
COE4014	Technology 2	3	
COE4022	Planning, Programming and Scheduling	2	Fisk E. R, 6th edition 2000, Construction Project
COE4028	Construction Management Seminar	2	
PRJ4014	Major Research Project	3	

**RECOMMENDED**  
Chudley, R. Construction Technology 1-4  
Fisk, E. R., (July 2005) Construction

Ahuja H. N., Dozzi, P. and AbouRizk, S.,  
Ahuja H. N., Dozzi, P. and AbouRizk, S.,

E & C Gaylord Structural Engineering

Nunnaly, S. W.  
Neville, A.M. & Brooks J.J.