Project Financing & Entrepreneurship

MEDIU MQA

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Abstract: Enable students to know and understand the knowledge and skill required in business field.

Contents:

1.	**Name of Course**					Project Financing & Entrepreneurship
2.	**Course Code**					**JBUS3282**
	JBUS = the first alphabet identify the faculty within which the subject is offered., JBUS= the remaining three alphabet identify the course that offers the subject, **3**282 = the first digit identify level of study; in this case undergraduate level, 3**28**2 = the second and third digits identify subject identity and 328**2**= the fourth digit identify credit value or credit hours					
3.	**Name(s) of academic staff**					To be Assigned
4.	**Rationale for the inclusion of the course/module in the programme**					Enable students to know and understand the knowledge and skill required in business field.
5.	**Semester and Year offered**					1/4
6.	**Total Student Learning Time (SLT)**	**Face to Face**				**Total Guided and Independent Learning**
	L = Lecture **T** = Tutorial **P** = Practical **S**=Studio Works **O**= Others	**L**	**T**	**P/S**	**O**	Independent Study(IS)= 56 Total = 84
		28	-	-	-	
7.	**Credit Value**					**2.0**
	Lecture (2 hours per week x 14 weeks)					
8.	**Prerequisite (if any)**					None
9.	**Course Objectives** 1. The objective of this course is to equip the students with the understanding offinancing and accounting fundamentals related to civil engineering construction and the student will be able to analyse the implication and adopt the suitable financial accounting option for the construction project. **Course Learning Outcomes (CLO)** At the end of the semester students should be able to: CLO1: Understand the fundamentals of finance and accounting that can be put to practical application in daily jobs of engineer and engineering managers. CLO2: Understand specific finance and cost accounting process, methods, strategies and terminology to ensure the survival and profitability of the construction project. CLO3: Understand the types of financing methods that related to construction projects. CLO4: Understand business opportunities and need for essential information CLO5: Understand a business plan					
10.	**Transferable Skills:** This course is expected the development of the following transferable skills**:** a) Self-management – an ability to manage time and task					

b) Learning skills

- An ability to learn both independently and co—operatively;
- An ability to use library skills, to find and organize information ;
- An ability to use a wide range of academic skills (research, analysis, synthesis etc.);
- An ability to identify and evaluate personal learning strategies.

c) Teamwork

- An ability to take responsibility and carry out agreed task;
- An ability to take initiative and lead other;
- An ability to identify and evaluate personal learning strategy.

d) Problem solving

- An ability to analyse;
- An ability to think laterally about a problem;
- An ability to identify strategy options;
- An ability to solve the problems

e) Information technologies

- An ability to use specialist software where relevant to the discipline.

11. **Teaching-learning and assessment strategy**

A variety of leaching strategies are used throughout the course, including the following:

- Classroom Lessons; Lecturer and power point presentations
- Tutorial Session;
- Student-Lecturer Discussion
- Collaborative and Co-operative learn;
- Independent study.

Assessment:

Course Work	**40%**
Assignment	10%
Tutorials /Quizzes	10%
Test	20%
Examination	**60%**
Total	**100%**

12. **Synopsis:**

This course governs the aspect of costing and finance which includes the basic knowledge on cost estimate, cost control, budget, cost planning and cost forecasting method to enable the student to relate the subject with the engineering background

13. **Mode of Delivery:**

Lectures.

14.	**Performance Criteria :**						
	CLO-PLO	Assessment Tool	1	2	3	4	5
	Marks		0-39	40-49	50-59	60-74	75-100
	Grade		**(F)**	**(D,D+)**	**(C-,C,C+)**	**(B-,B,B+)**	**(A-,A,A+)**
	CLO1: Understand the fundamentals of finance and accounting that can be put to practical application in daily jobs of engineer and engineering managers.	**Assignment** **Tutorial** **Quizzes** **Test** **Examination**	**Fail to:** • Familiar with the basics of costing, accounting and financing • Know cost accounting and project economics • Know to estimate procurement, labour, construction, schedules and other costs • Know to estimate direct and indirectcosts • Know contract costing • Familiar with Work capital, construction contract and types of construction contract.	**Poor to:** • Familiar with the basics of costing, accounting and financing • Know cost accounting and project economics • Know to estimate procurement, labour, construction, schedules and other costs • Know to estimate direct and indirectcosts • Know contract costing • Familiar with Work capital, construction contract and types of construction contract.	**Satisfactory to:** • Familiar with the basics of costing, accounting and financing • Know cost accounting and project economics • Know to estimate procurement, labour, construction, schedules and other costs • Know to estimate direct and indirectcosts • Know contract costing • Familiar with Work capital, construction contract and types of construction contract.	**Good to:** • Familiar with the basics of costing, accounting and financing • Know cost accounting and project economics • Know to estimate procurement, labour, construction, schedules and other costs • Know to estimate direct and indirectcosts • Know contract costing • Familiar with Work capital, construction	**Excellent to:** • Familiar with the basics of costing, accounting and financing • Know cost accounting and project economics • Know to estimate procurement, labour, construction, schedules and other costs • Know to estimate direct and indirectcosts • Know contract costing • Familiar with Work capital, construction contract and types of construction contract.

						contract and types of construction contract.	
	CLO2: Understand specific finance and cost accounting process, methods, strategies and terminology to ensure the survival and profitability of the construction project.	**Assignment** **Tutorial** **Quizzes** **Test** **Examination**	**Fail** to: • Familiar with cost control system • Familiar with budgeting and preparation of budgets • Know planning and schedule control • Know cost forcasting and cost evaluation	**Poor to:** • Familiar with cost control system • Familiar with budgeting and preparation of budgets • Know planning and schedule control • Know cost forcasting and cost evaluation	**Satisfactory to:** • Familiar with cost control system • Familiar with budgeting and preparation of budgets • Know planning and schedule control • Know cost forcasting and cost evaluation	**Good to:** • Familiar with cost control system • Familiar with budgeting and preparation of budgets • Know planning and schedule control • Know cost forcasting and cost evaluation	**Excellent to:** • Familiar with cost control system • Familiar with budgeting and preparation of budgets • Know planning and schedule control • Know cost forcasting and cost evaluation
	CLO3: Understand the types of financing methods that related to construction projects.	**Assignment** **Tutorial** **Quizzes** **Test** **Examination**	**Fail to:** • Familiar with the sources of construction loan financing • Understand debt financing • Understand with equity financing	**Poor to:** • Familiar with the sources of construction loan financing • Understand debt financing • Understand with equity financing	**Satisfactory to:** • Familiar with the sources of construction loan financing • Understand debt financing • Understand with equity financing	**Good to:** • Familiar with the sources of construction loan financing • Understand debt financing • Understand with equity financing	**Excellent to:** • Familiar with the sources of construction loan financing • Understand debt financing • Understand with equity financing

	CLO4: Understand business opportunities and need for essential information	**Assignment** **Tutorial** **Quizzes** **Test** **Examination**	**Fail to:** • Understand business opportunities • Understand the need for essential information	**Poor to:** • Understand business opportunities • Understand the need for essential information	**Satisfactory to** • Understand business opportunities • Understand the need for essential information	**Good to:** • Understand business opportunities • Understand the need for essential information	**Excellent to:** • Understand business opportunities • Understand the need for essential information
	CLO5: Understand a business plan	**Assignment** **Tutorial** **Quizzes** **Test** **Examination**	**Fail to:** • Understand stand business plan and the process of preparing a business plan	**Poor to:** • Understand stand business plan and the process of preparing a business plan	**Satisfactory to:** • Understand stand business plan and the process of preparing a business plan	**Good to:** • Understand stand business plan and the process of preparing a business plan	**Excellent to:** • Understand stand business plan and the process of preparing a business plan

15. **Mapping of the Programme Objectives to the Programme Learning Outcomes**

Programme Learning Outcomes (PLO) / **Programme Objectives (PO)**	**PLO1:** Ability to acquire and apply knowledge of science and engineering fundamentals;	**PLO2:** Acquired in-depth technical competence in civil engineering discipline;	**PLO3:** Ability to undertake problem identification, formulation and solution;	**PLO4:** Ability to utilize systems approach to design and evaluate operational performance;	**PLO5:** Understanding of the principles of design for sustainable development;	**PLO6:** Understanding of professional ethics, Islamic values, social, cultural, global and environmental responsibilities of a professional engineer and commitment to them;	**PLO7:** Ability to communicate effectively, not only with engineers but also with the community at large;	**PLO8:** ability to function effectively as an individual;	**PLO9:** Ability to function effectively in group with the capacity to be a leader or manager;	**PLO10:** Recognizing the need to undertake lifelong learning, and possessing /acquiring the capacity to do so;	**PLO11**: ability to become Entrepreneur;
PEO1: To produce graduates with proficient knowledge and competency in various areas in Civil/ Electrical/ Mechanical Engineering	✓	✓	✓								
PEO2: To produce graduates with professional, generic attributes to meet the present and future global demands.				✓	✓	✓			✓	✓	
PEO3: To produce graduates with Islamic humanistic values and reinvention skills to meet the requirement of a dynamic environment. These skills include Civil Intelligence, Moral Intelligence, Self-Reliance and Communication Skills							✓	✓	✓		✓

16.	**Mapping of the course Learning Outcome to the Programme Outcome**											
	Programme Learning Outcomes (PLO) / **Course Learning Outcome (CLO)**	**PLO1:** Ability to acquire and apply knowledge of science and engineering fundamentals;	**PLO2:** Acquired in-depth technical competence in civil engineering discipline;	**PLO3:** Ability to undertake problem identification, formulation and solution;	**PLO4:** Ability to utilize systems approach to design and evaluate operational performance;	**PLO5:** Understanding of the principles of design for sustainable development;	**PLO6:** Understanding of professional ethics, Islamic values, social, cultural, global and environmental responsibilities of a professional engineer and commitment to them;	**PLO7:** Ability to communicate effectively, not only with engineers but also with the community at large;	**PLO8:** ability to function effectively as an individual;	**PLO9:** Ability to function effectively in group with the capacity to be a leader or manager;	**PLO10:** Recognizing the need to undertake lifelong learning, and possessing /acquiring the capacity to do so;	**PLO11**: ability to become Entrepreneur;
	CLO1: Understand the fundamentals of finance and accounting that can be put to practical application in daily jobs of engineer and engineering managers.	✓										
	CLO2: Understand specific finance and cost accounting process, methods, strategies and terminology to ensure the survival and profitability of the construction project.	✓		✓								

	CLO3: Understand the types of financing methods that related to construction projects.	✓	✓	✓								
	CLO4: Understand business opportunities and need for essential information	✓		✓								
	CLO5: Understand a business plan	✓	✓	✓								

17.	Content outline of the course/module and the SLT per topic						
		Details	**SLT (Hour)**				
			L	**T**	**P**	**IS**	**Total**
	Topic 1	**Introduction** • Why every engineer should know about Accounting and Finance. • Differences between costing and finance • Differences between cost accounting and construction • Cost Accounting • Project Economics	2	-	-	4	**6**

	Topic 2	**Construction Cost Engineering**
		• Estimate
		  ◦ Plant location, site access, procurement, engineering construction, construction labour, schedule, other costs.
		• Type of estimates and estimating method
		  ◦ Direct and indirect cost,
		  ◦ Work capital, construction contract and types of construction contract.
		• Contract Costing
		  ◦ Introduction
		  ◦ Features of contract costing
		  ◦ Purpose of contract costing
		• Contingency, allowance and escalation
			3	-	-	6	**9**

	Topic 3	**Cost Control**
		• Implementing cost control system
		    • Definition
		    • Objectives
		    • Resistance to cost control
		    • Quality/cost/schedule conflicts
		    • Who control costs?
		    • Control technique
		    • Financial control
		        ▪ Cost behaviour
		        ▪ Break even analysis
		• Budgets
		    • Definition
		    • Purposes
		    • Code and Forms for Budgeting
		    • Budget preparation
		    • Types of Budgeting
		        ▪ Cash budget
		        ▪ Fixed and flexible budget
		• Planning and schedule control
		    • Time is money
		    • Time control
		    • Cost/schedule interface and correlation
		    • Cash flow.
			4	-	-	8	**12**

	Topic 4	**Financing** • Type and Methods • Source of financing • Risks	4	-	-	8	**12**

	Topic 5	**Cost Forecasting and Evaluation**
		• Cost Forecasting
		• Cost-status evaluation
		• Types cost evaluation
		    • Capital investment appraisal
		    • Standard costing (analysis of variance)
		    • Cost analysis
			4	-	-	8	**12**

	Topic 6	**Uncovering Opportunities & Cognitive foundation of entrepreneurship** • Sources of Opportunities • Forms of Opportunity • Opportunities and New Firms • The Raw Materials for Creativity and Opportunity • Recognition • Creativity • Opportunity Recognition	4	-	-	8	**12**
	Topic 7	**Acquiring Essential Information** • Market Information • Government Policies and Regulations • Interpreting Information • Group Polarization • Ignoring Unshared Information • Improving Group Decisions.	3	-	-	6	**9**
	Topic 8	**Writing an Effective Business Plan** • Business Plan • Components of a Business Plan • Making an Effective Business Plan Presentation	4	-	-	8	**12**
	Total(Hour)		**28**	**-**	**-**	**56**	**84**
18.	**Main references supporting the course** 1. Project Financing: Asset-based Financial Engineering (Wiley Finance) 2nd Edition by John D. Finnerty ,May 2007 2. Principles of Project Finance, E.R.Yescombe, Academic Press, 2002						
	Additional references supporting the course 1. Project Finance for Construction and Infrastructure: Principles and Case Studies, F. Pretorius,A.McInnes, P.Lejot, D.Arner, B.C.H.Fong, Blackwell, 2008						
19.	**Other additional information** All materials will be available to the students in the library.						

References:

1. Project Financing: asset-base a financial engineering (wiley finance) 2nd edition by john d.finnery may 2007
2. Principles of Project Finance, E.R.Yescombe, Academic Press, 2002

Additional References :

1. Project Finance for Construction and Infrastructure: Principles and Case Studies, F. Pretorius,A.McInnes, P.Lejot, D.Arner, B.C.H.Fong, Blackwell, 2008