

Pokhara University
Faculty of Science and Technology
Entrance Examination Curriculum
Master of Science in Construction Management

Total marks: 100

Qualifying marks: 45

Time: 3 hrs

Entrance curriculum mainly covers common topics of all streams covering Engineering Economics, Project Engineering, Construction Management and Engineering Professional Practice.

| Section | Course | Weightage (%) |
|---------|-----------------------------------|---------------|
| A | Engineering Economics | 30 |
| B | Project Engineering | 30 |
| C | Construction Management | 30 |
| D | Engineering Professional Practice | 10 |
| | Total | 100 |

Section A: Engineering Economics:

Interest and Time Value of Money, Payback Period, Net Present Value, Internal Rate of Return, External Rate of Return, Benefit Cost Analysis, Financial and Economic Analysis, Breakeven Analysis, Sensitivity Analysis, Law of Demand and Supply.

Section B: Project Engineering:

Definition and Characteristics of Project, Project Cycle, Types of Project, Feasibility Analysis, Project Proposal, Bar Chart, CPM, PERT, Resource Levelling, Project Monitoring and Control, Earned Value Analysis, Time Cost Trade off Analysis, Capital Budgeting Techniques, Capital Structure Planning.

Section C: Construction Management:

Construction Management Framework, Material Management, Construction Equipment, Job Layout, Method of Contract, Types of Contract, Request for Proposal, Expression of Interest, Bidding Document, Tender Notice, Bid Evaluation, Conditions of Contract, Contract Document, Running Bill, Project Completion Report, Personnel Management, Project Maintenance, Health and Safety at site.

Section D: Engineering Professional Practice:

Ethics and Profession, Code of Conduct, Professional Associations, Nepal Engineering Council Act, Liability and Negligence, Professional Liability Insurance, Detailed duties of Engineers, Types of Business Organizations, Labor Law, Intellectual Property right.