UNIVERSITI TEKNOLOGI MARA

WTE256: WOOD SEASONING AND PRESERVATION

Course Name (English)	WOOD SEASONING AND PRESERVATION APPROVED
Course Code	WTE256
MQF Credit	3
Course Description	This course covers basic knowledge on wood seasoning and preservation technology.
Transferable Skills	Communication skill, understand the procedure of wood preservation and wood drying especially drying properties, defect, wood destroying agent, wood enhancement ,protection, etc
Teaching Methodologies	Lectures, Blended Learning, Presentation
CLO	CLO1 Classify the theoretical knowledge on the principles of wood seasoning and preservation CLO2 Differentiate some of the problem in wood seasoning and preservation CLO3 Explain the theoretical concepts and principles of wood seasoning and preservation
Pre-Requisite Courses	No course recommendations

Topics
1. 1.0 Introduction 1.1) 1.1 The important of wood seasoning and preservation
2. 2.0 The deterioration of wood 2.1) 2.1 introduction to the deterioration of wood 2.2) 2.2 Biotic degradation 2.3) 2.3 Abiotic degradation
3. 3.0 Wood seasoning 3.1) 3.1 Introduction 3.2) 3.2 Advantages of wood drying 3.3) 3.3 Water and wood relationship 3.4) 3.4 EMC 3.5) 3.5 Moisture movement in wood 3.6) 3.6 Wood drying and dimensional changes 3.7) 3.7 Wood drying defect
4. 4.0 Seasoning methods 4.1) 4.1 Methods of seasoning 4.2) 4.1.1 Air drying 4.3) 4.1.2 Kiln drying 4.4) 4.1.3 Other method 4.5) 4.3 Lumber staking 4.6) 4.4 Sample board and kiln sample 4.7) 4.5 Care of dried timber
5. 5.0 Wood preservation 5.1) 5.1 Introduction 5.2) 5.1.1 Wood Selection 5.3) 5.1.2 Wood Coating 5.4) 5.2 Wood preservatives 5.5) 5.2.1 Oil Borne 5.6) 5.2.2 Water Borne 5.7) 5.3 Wood preservation method 5.8) 5.3.1 Non pressure process 5.9) 5.3.2 Pressure process

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment

Assessment Type	Assessment Description	% of Total Mark	CLO
Discussion	Written Report	20%	CLO3
Online Quiz	Quiz	20%	CLO1
Presentation	Presentation	30%	CLO2
Test	Test	30%	CLO1

Reading List

Recommended Text

- **R.B. Keey,T.A.G. Langrish,J.C.F. Walker 2012, *Kiln-Drying of Lumber*, Springer Science & Business Media [ISBN: 3642596533]**
- **G.W. Findlay 2013, *Preservation of timber in the tropics*, Springer Science & Business Media [ISBN: 940172752X]**
- **R.B. Keey,T.A.G. Langrish,J.C.F. Walker 2012, *Kiln-Drying of Lumber*, Springer Science & Business Media [ISBN: 3642596533]**

Article/Paper List: This Course does not have any article/paper resources

Other References: This Course does not have any other resources