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# Advisory meeting

Department of Forest and Wood Science  
Academic Programme  
2016



**Faculty of AgriSciences**



# Programmes 2016



- BSc Forestry and Wood Science
  - Forestry and Natural Resource Sciences
  - Wood and Wood Products Sciences
- Post Graduate Diploma in Forestry and Wood Sciences
- MScFor (180 credits – research)
  - Forestry and Natural Resource Sciences
  - Wood and Wood Products Sciences
- PhD(For)
- DSc(For)



# 2014 - Future challenges



- Programme renewal – 2015/16
- Align with current teaching and learning trends
  - ICT
  - Industry needs
  - Less modules and credits (120 credits per year)
  - Graduate attribute
    - An enquiring mind,
    - An engaged citizen,
    - A dynamic professional,
    - A well-rounded individual.



# Re-curriculation changes



- Reduce credit load to 120 per year
  - Focus on core modules
  - Streamline flow between modules
- Larger integration between Wood and Forest Science programmes
  - Reduce duplication
  - Increase knowledge of full value chain
- Graduate Attributes and ICT



# BSc For (Forestry and Natural Resource Sciences)



# Forestry – First Year



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Module Name	#	FS - WPS com	2017 change	KT 2016	KT 2017
<b>BSc For (Forest and Natural Resources Sciences)</b>					
<b>First Year</b>					
Biology	124			16	16
Biology	144		Discontinued	16	0
Biology	154			16	16
Chemistry	124			16	16
Chemistry	144			16	16
Computer skills	171			4	4
FS - Introduction	171	FS + WPS	Increased to 24 credits	12	24
Matematics (Bio)	124			16	16
Physics (Bio)	134			16	16
<b>Total Credits</b>				<b>128</b>	<b>124</b>



# Forestry – Second Year



Module Name	#	FS - WPS com	2017 change	KT 2016	KT 2017
<b>BSc For (Forest and Natural Resources Sciences)</b>					
<b>Second Year</b>					
Biometry	212			8	8
Biometry	242			8	8
Computer Skills	272			5	5
FS - Natural forest ecosystems	212	FS		8	8
FS - Forest mensuration and inventory	254	FS+WPS new	Also for WPS	16	16
FS - Botany	274	FS+WPS	Discontinued	16	0
Geography and Environmental Studies	214			16	16
Soil Science	214			16	16
WPS - Wood anatomy and identification	224	FS + WPS	Was WPS 144	16	16
WPS - Mechanics of wood products	244	FS + WPS		16	16
WPS - Wood physics and drying	264	FS + WPS new	Also for FS	0	16
<b>Total Credits</b>				<b>125</b>	<b>125</b>



# Forestry – Third Year



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Module Name	#	FS - WPS com	2017 change	KT 2016	KT 2017
<b>BSc For (Forest and Natural Resources Sciences)</b>					
<b>Third Year</b>					
Biometry	312			8	8
Conservation Ecology	314		Discontinued	16	0
FS - Silviculture I	356	FS + WPS	Was FS 314, also WPS	16	16
FS - Forestry development	344	FS	Discontinued	16	0
FS - Forest growth and yield science	334	FS + WPS	Was FS 354	16	16
FS - Forest economics	355	FS + WPS		16	16
FS - Timber harvesting	364	FS		16	16
Genetics	214			16	16
Soil Science	314			16	16
WPS - Wood adhesives and composite production	335	FS + WPS	Also FS	0	16
<b>Total Credits</b>				<b>136</b>	<b>120</b>





# Forestry – Fourth Year



Module Name	#	FS - WPS com	2017 change	KT 2016	KT 2017
<b>BSc For (Forest and Natural Resources Sciences)</b>					
<b>Fourth Year</b>					
FS - Silviculture II	414	FS	Reduced to 8 credits, Discontinued for WPS	16	8
FS - Forest management	424	FS		16	16
FS - Forest roads and transport	434	FS		16	16
FS - Silviculture III	435	FS		8	8
FS - Practical work	442	FS + WPS		1	1
FS - Project or management plan	468	FS + WPS	Also WPS	32	32
Industrial Psychology (Special)	354			12	12
Strategic Management	344		Discontinued	12	0
WPS - Wood products manufacturing	414	FS + WPS		16	16
WPS - Bio-energy	444	FS + WPS		12	12
<b>Total Credits</b>				<b>141</b>	<b>121</b>



# Forestry summary



Credit changes		
	2016	2017
Total Programme	530	490
Total FS	221	193
Total WPS	60	92
Total FS and WPS	281	285
Total FS and WPS Percentage	53%	58%
Total FS + WPS Combined	185	213
Total FS + WPS Combined Percentage	35%	43%



# BSc For (Wood and Wood Products Sciences)



# Wood Science – First year



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Module Name	#	FS - WPS com	2017 change	KT 2016	KT 2017
<b>BSc For (Wood and Wood Product Sciences)</b>					
<b>First Year</b>					
Applied Mathematics B	124			15	15
Computer Programming	143			12	12
Engineering Chemistry	123			15	15
Engineering Drawings	123			15	15
Engineering Mathematics	115			15	15
Engineering Mathematics	145			15	15
FS - Introduction	171	FS + WPS	Increased to 24 credits	12	24
Strength of Materials	143			12	12
WPS - Wood anatomy and identification	144	FS + WPS	Moved to 2nd year (WPS 224)	16	0
<b>Total Credits</b>				<b>127</b>	<b>123</b>



# Wood Science – Second year



Module Name	#	FS - WPS com	2017 change	KT 2016	KT 2017
<b>BSc For (Wood and Wood Product Sciences)</b>					
<b>Second Year</b>					
Engineering Economics	212			8	0
Engineering Mathematics	214			15	15
Industrial Programming	244			15	15
FS - Forest mensuration and inventory	254	FS+WPS new	Also for WPS	0	16
FS - Botany	274	FS+WPS	Discontinued	16	0
Production Management	212			8	8
Professional Communication	113			8	8
WPS - Wood anatomy and identification	224	FS + WPS	Was WPS 144	0	16
WPS - Wood chemistry and preservation	234	WPS		16	16
WPS - Mechanics of wood products	244	FS + WPS		16	16
WPS - Wood physics and drying	264	FS + WPS new	Also for FS	16	16
<b>Total Credits</b>				<b>118</b>	<b>126</b>



# Wood Science – Third year



Module Name	#	FS - WPS com	2017 change	KT 2016	KT 2017
<b>BSc For (Wood and Wood Product Sciences)</b>					
<b>Third Year</b>					
Engineering Statistics	314			15	15
Industrial Management	354			15	15
FS - Silviculture I	356	FS + WPS	Was FS 314, also WPS	0	16
FS - Forest growth and yield science	334	FS + WPS	Was FS 354	16	16
FS - Forest economics	355	FS + WPS		16	16
FS - Silviculture II	414	FS + WPS	Discontinued for WPS	16	0
Operations Research (Eng)	345			15	15
Quality Assurance	344			15	15
WPS - Surface finishing and wood preservation	314	WPS	Becomes WPS 434 (16)	12	0
WPS - Wood adhesives and composite production	335	FS + WPS	Also FS	16	16
<b>Total Credits</b>				<b>136</b>	<b>124</b>



# Wood Science – Fourth year



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Module Name	#	FS - WPS com	2017 change	KT 2016	KT 2017
<b>BSc For (Wood and Wood Product Sciences)</b>					
<b>Fourth Year</b>					
Enterprise Design	444		Discontinued	15	0
FS - Practical work	442	FS + WPS		1	1
FS - Project or management plan	468	FS + WPS	Also WPS	0	32
Industrial Ergonomics	414			15	15
Operational Research (Eng)	415			15	15
Quality Management	444			15	15
WPS - Wood products manufacturing	414	FS + WPS		16	16
WPS - Surface finishing and wood preservation	434	WPS	Was WPS 314 (12)	0	16
WPS - Bio-energy	444	FS + WPS		12	12
WPS - Research project	468	WPS	Integrated into FS 468	32	0
<b>Total Credits</b>				<b>121</b>	<b>122</b>



# Wood Science summary



Credit changes		
	2016	2017
Total Programme	502	495
Total FS	77	121
Total WPS	152	124
Total FS and WPS	229	245
Total FS and WPS Percentage	46%	49%
Total FS + WPS Combined	169	213
Total FS + WPS Combined Percentage	34%	43%





# Conclusion

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- Well rounded graduate who understands value chain
- Module framework as foundation for integration of assessments
  - Graduate attributes
- Future focus on ICT and blended learning