

**Plan d'études 2019-2021**  
**Master of Arts HES-SO in Conservation-Restoration**  
**120 ECTS**

Haute Ecole Arc  
Conservation-restauration  
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Module	Unit CRAE	Coef unit CRAE	Unit CROSTH	Coef unit CROSTH	Unit title	Teacher	Course hours CRAE	Course hours CROSTH	ECTS per semester					
									120					
									ECTS S1	ECTS S2	ECTS S3	ECTS S4		
<b>MTC1</b>									<b>52</b>	<b>36</b>	<b>5</b>			
	MTC1.1-AE	0.5			Ceramics	HDE	24							
	MTC1.2-AE	0.4	MTC1.2-STH	0.7	Organic materials - animal fibers	Alembik	20	20						
	MTC1.3-AE	0.1	MTC1.3-STH	0.1	Naturalia	Cuisin	8	8						
			MTC1.1-STH	0.2	Conservation of objects used in public transport	Meyer zu Bargholz		8						
<b>MTC2</b>									<b>52</b>	<b>52</b>	<b>5</b>			
	MTC2.1	-	MTC2.1	-	Research in Conservation -preparatory work	CDE	12	12						
	MTC2.2	-	MTC2.2	-	Research in Conservation - course	CDE	32	32						
	MTC2.3	1.0	MTC2.3	1.0	Research in Conservation - final assessment	CDE	8	8						
<b>MTC3</b>									<b>56</b>	<b>80</b>	<b>5</b>			
	MTC3.1-AE	0.4			Society, objects and collections	AGM	24							
			MTC3.1-STH	0.6	History of sciences and techniques	JBO / FGO		48						
	MTC3.2-AE	0.5	MTC3.2-STH	0.3	Humanities and objects' investigation	RBE, unine	24	24						
	MTC3.3-AE	0.1	MTC3.3-STH	0.1	Conservation issues in Museum exhibitions: from showcases design to installation of objects	Vasquez J.	8	8						
<b>MWP1</b>									<b>136</b>	<b>124</b>	<b>5</b>			
	MWP1.1-AE	1.0			Ceramics 1	HDE	128							
			MWP1.1-STH	1.0	Technical and scientific objects 1	RBE	8							
						GRA		84						
						TSC		32						
						RBE		8						
<b>MWP2</b>									<b>104</b>	<b>104</b>	<b>5</b>			
	MWP2.1-AE	0.3			Ceramics 2	HDE	40							
	MWP2.2-AE	0.5	MWP2.2-STH	0.5	Colour and retouching	ANG (40/40) HDE (0/16)	40	56						
			MWP2.1-STH	0.2	Infography	RJE		24						
	MWP2.3-AE	0.2	MWP2.3-STH	0.3	Conservation and restoration in geosciences	Becker	24	24						
<b>MWP3</b>									<b>116</b>	<b>116</b>	<b>5</b>			
	MWP3.1-AE	0.9			Organic materials - animal fibers	Alembik	60							
						Bonnot-Diconne	40							
			MWP3.1-STH	0.9	Technical and scientific objects 2	GRA		68						
						Fritschi		24						
						TSC		8						
	MWP3.2-STH	0.1	MWP3.2-STH	0.1	Microanalysis - materials characterisation	EJO	16	16						
<b>MTC4</b>									<b>52</b>	<b>52</b>	<b>5</b>			
	MTC4.1	-	MTC4.1	-	Managing Conservation-Restoration Projects - preparatory work	RBE	8	8						
	MTC4.2	-	MTC4.2	-	Managing Conservation-Restoration Projects - course	RBE	32	32						
	MTC4.3	1.0	MTC4.3	1.0	Managing Conservation-Restoration Projects - final assessment	RBE	12	12						
<b>MTC5</b>									<b>38</b>	<b>60</b>	<b>5</b>			
	MTC5.1-AE	0.8	MTC5.1-STH	0.3	Metals and alloys	VBO	20	20						
					Metals and alloys	JSC	2	2						
	MTC5.2-AE	0.1			Mineral fibers identification	Rast	4							
	MTC5.3-AE	0.1			Numismatic	Frey	4							
			MTC5.2-STH	0.5	Horological / electrical objects	TSC		30						
			MTC5.3-STH	0.2	Modern alloys	CDE	8	8						
<b>MTC7</b>									<b>47</b>	<b>47</b>	<b>5</b>			
	MTC7.1	0.4	MTC7.1	0.4	Scientific analysis in conservation	CDE	24	24						
	MTC7.2	0.3	MTC7.2	0.3	Microscopy	CDE	8	8						
	MTC7.2		MTC7.2		Microscopy	Scherrer	7	7						
	MTC7.3	0.3	MTC7.3	0.3	Crystallography / metallography	CDE	8	8						
<b>MTH1</b>									<b>12</b>	<b>12</b>	<b>5</b>			
	MTH1	1.0	MTH1	1.0	Master's thesis 1	RBE / VBO / TSC	12	12						
<b>MWP4</b>									<b>180</b>	<b>162</b>	<b>5</b>			
	MWP4.1-AE	0.9	MWP4.1-STH		Metals and alloys 1	VBO	126	12						
						RJE	6	6						
						CDE	16							
						RBE	16							
						VBO/CDE/RBE	8							
	MWP4.2-AE	0.1	MWP4.2-STH	0.1	Hammering	a Marca	8	8						
			MWP4.3-STH	0.9	Horology 1	TSC		104						
						à déf.		24						
						RBE		8						
<b>MWP5</b>									<b>150</b>	<b>144</b>	<b>5</b>			
	MWP5.1-AE	1.0	MWP5.1-STH	0.1	Metals and alloys 2	VBO	150	8						
			MWP5.3-STH	0.7	Horology 2	TSC		82						
						à déf.		24						
			MWP5.4-STH	0.2	Electrical objects	GRA	0	30						

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<b>MTC6</b>							<b>52</b>	<b>52</b>	<b>5</b>			
	MTC6.1	-	MTC6.1	-	Principles in Conservation - preparatory work	TSC	12	12				
	MTC6.2	-	MTC6.2	-	Principles in Conservation - course	TSC	32	32				
	MTC6.3	1.0	MTC6.3	1.0	Principles in Conservation - final assessment	TSC	8	8				
<b>MTC9</b>							<b>48</b>	<b>36</b>	<b>5</b>			
	MTC9.1-AE	0.5	MTC9.1-STH	0.2	Glasses	HDE	24	8				
	MTC9.2-AE	0.5	MTC9.2-STH	0.4	Organic materials - plant fibers	Goron	16	16				
			MTC9.4-STH	0.4	Mosaïcs	Chantriaux	8					
					Horology history and styles / Functional description of mechanisms	TSC		12				
<b>MWP6</b>							<b>72</b>	<b>95</b>	<b>5</b>			
	MWP6.1-AE	1.0			Glasses 1	HDE	72					
			MWP6.1-STH	1.0	Technical and scientific objects 3	GRA		40				
						TSC		32				
						Expert à déf.		23				
<b>MWP7</b>							<b>74</b>	<b>76</b>	<b>5</b>			
	MWP7.1-AE	1.0			Glasses 2	HDE	54					
			MWP7.1-STH	1.0	Technical and scientific objects 4	GRA		24				
						Sauter		24				
						Braekman		8				
	MWP7.2-AE		MWP7.2-STH		Enzymes	Cremonesi	20	20				
<b>MWP8</b>							<b>112</b>	<b>88</b>	<b>5</b>			
	MWP8.1-AE	1.0			Organic materials - plant fibers 1	Goron (avec RBE 8h)	84					
			MWP8.1-STH	0.7	Technical and scientific objects 5	Cuendet	28					
						GRA		48				
						CDE		8				
						RBE		8				
						Meyer zu Bargholz		24				
<b>MWP9</b>							<b>100</b>	<b>76</b>	<b>5</b>			
	MWP9.1-AE	0.3	MWP9.1-STH	0.4	Introduction to electrochemical treatments in conservation	CDE	32	32				
	MWP9.2-AE	0.2	MWP9.2-STH	0.3	Complexing agents in CR	RBE	20	20				
	MWP9.3-AE	0.2	MWP9.3-STH	0.2	Complexing agents in CR - tests	à déf.	4-8	4-8				
					Polymers	Rouzet	8	8				
	MWP9.4-AE	0.2			Preservation of painted layers	ANG	8	8				
					Conservation on site	Tissier	16					
	MWP9.5-AE	0.2			Stone, mortar, mural painting, rock art 1	Guyot	16					
			MWP9.4-STH	0.1	Introduction to tribology in CR	TSC		8				
<b>MTC8</b>							<b>52</b>	<b>52</b>	<b>5</b>			
	MTC8.1	-	MTC8.1	-	Evaluating CR Treatments - preparatory work	HDE	12	12				
	MTC8.2	-	MTC8.2	-	Evaluating CR Treatments - course	HDE	32	32				
	MTC8.3	1.0	MTC8.3	1.0	Evaluating CR Treatments - final assessment	HDE	8	8				
<b>MTH2</b>							<b>0</b>	<b>0</b>	<b>25</b>			
	MTH2	1.0	Thesis	1.0		RBE, HDE, VBO, TSC, CDE	0	0				

CRAE : archaeological and ethnological objects

CROSTH : scientific, technical and horological objects

1 course hour = 60 minutes, 5 ECTS = about 150 Student Working Hours

All courses but the scientific platform (MWPX- PFS) are evaluated on a regular basis (written or oral examinations, written documentations, exercises and laboratories or presence)