
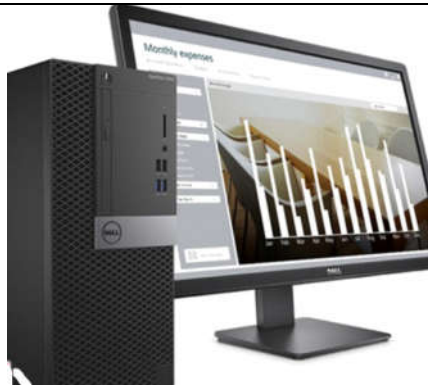
















## EQUIPMENT AT SCHOOL OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY (INEST), HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY (HUST) FOR COLLABORATIVE USE TO INTENSE PARTNERS






Equipment (purchased by INTENSE project)					
No	Equipment	Technical specification	Purpose	Quantity	Photo
1	Desktop computer	Dell Precision (Workstation) 3620, appropriate for math model calculation, includes: / Intel Core i7-6700 (3.40GHz,8MB)/ Ram 32GB (4x8GB)/ 256GB SSD Sam Sung Pro +1TB HDD/ DVDRW/ VGA NVIDIA Quadro 4GB Graphics/ 4 mDP to DP adapters/ Mouse/ Keyboard/ Ubuntu/ 3Yrs UPS APC Smart-UPS C 1000VA LCD (SMC1000I)	E - Learning	1	
2	Desktop computer	Dell Optiplex 3050MT/ Intel core i5-7500 (3.40GHz upto 3.80GHz, 6MB) / Ram 16GB DDR4 2400Mhz/ 120GB SSD + HDD 1TB / Integrated Intel HD Graphics/ DVDRW/ Key & Mouse/ Fedora/ Malaysia/ 1 Year UPS APC Smart-UPS C 1000VA LCD (SMC1000I) Display 24 "Dell UltraSharp U2412M black Power supply Logitech K270 UKR (920-003762) Logitech Wireless Keyboard K270 UKR (920-003762)	E - Learning	6	






3	Portable hard Drive	Toshiba Canvio Advance Portable Hard Drive 2TB	E - Learning	1	 <p>The image shows a black, rectangular Toshiba Canvio Advance portable hard drive. It has the Toshiba logo in the top left corner. At the bottom, there is a white sticker with the European Union flag and the text: "With the support of the Erasmus+ Programme of the European Union".</p>
4	Multifunction Printer	HP LASERJET PRO MFP M426FDW multifunction printer (F6W15A).	E - Learning	1	 <p>The image shows a white HP LaserJet Pro MFP M426FDW multifunction printer. It is a large, boxy device with a control panel on the left side and a paper tray on top. The HP logo is visible on the front panel.</p>
5	Laptop	Dell Inspiron 13 5379 / Grey/ Intel Core i5-8250U (1.60Ghz upto 3.40Ghz, 6MB)/ Ram 8GB DDR4/ HDD256GB SSD/ 13.3 inch FHD Touch/ Inte 1 UHD Graphics 620 / Pin 3 Cell 42Whr/ WC + BT + Wifi/ LED_KB /Win 10 SL+OFF 365	E - Learning	2	 <p>The image shows a blue Dell Inspiron 13 5379 laptop. The laptop is closed and lying flat on a light-colored surface. The Dell logo is visible on the bottom edge of the lid.</p>

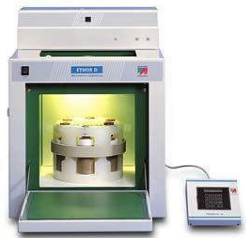



Equipment (INEST)					
No	Equipment	Purpose	Place to use	Quantity	Photo
1	High performance liquid chromatograph (HPLC) Model: Agilent 1100HP/USA	<ul style="list-style-type: none"> <li>- Analysis of drugs</li> <li>- Analysis of synthetic polymers</li> <li>- Analysis of pollutants in environmental analytics</li> <li>- Determination of drugs in biological matrices</li> </ul>	Lab	1	 A photograph of an Agilent 1100 High Performance Liquid Chromatography (HPLC) system. The system consists of a pump, injector, and detector, all stacked vertically. A computer monitor and keyboard are visible to the right of the equipment.
2	Gas chromatography - Mass spectrometry (GC-MS) Model: Agilent 6890N	Qualitative and quantitative analysis of organic compounds such as volatile organic compounds, PCBs, Pesticides...	Lab	1	 A photograph of an Agilent 6890N Gas Chromatography-Mass Spectrometry (GC-MS) system. The system is a large, complex piece of laboratory equipment with multiple components, including a gas chromatograph and a mass spectrometer, situated in a laboratory setting.
3	Absorption atomic spectrometry Model: AAS 800 Perkin Elmer	AAS can be used to determine different elements in environmental samples and is used in pharmacology, biophysics, archaeology and toxicology research.	Lab	1	 A photograph of a Perkin Elmer AAS 800 Atomic Absorption Spectrometer. A person is visible in the foreground, looking at the instrument. The instrument is a large, white, boxy piece of equipment with a control panel and a sample compartment.

4	Inductively coupled plasma mass spectrometry ICP/MS DRC-E900 Perkin Elmer/Canada	Detection of metals and several non metals in environmental samples, food samples at very low concentrations	Lab	1	
5	KJELDAHL Automatic Protein Distillation Kit UDK142 Velp	Used to determine Kjeldahl nitrogen, alcohol, ammonia, cyanide, phenol... in cereals, animal feed, food, chemical compounds...	Lab	1	
6	Ultra violet-Visible UV/vis Lamda 35 (Perkin Elmer) / Canada	UV/Vis spectroscopy is routinely used in analytical chemistry for the quantitative determination of different analytes, such as transition metal ions, highly conjugated organic compounds, and biological macromolecules	Lab	1	
7	Drying oven Thermo Heraeus	Drying items, environmental samples	Lab	1	

8	Thermostat cabinet for 2 BOD Oxitop system BOD TS606/2i (Germany)	Determination of BOD	Lab	2	
9	Shaker Water Bath Model: GFL 1092 (Germany)		Lab	2	
10	Analytical weighing balances GR 202 (Japan)	Used to weigh chemicals, samples...	Lab	2	
11	Freezer SUPERPOLO 320- Fichetti	Storage of environmental samples	Lab	2	

12	Orion 3- star Plus DO Meter	Determination of DO in water samples.	Field	1	
13	Ion chromatography IC DIONEX 600	Analysis of cations and anions in environmental samples.	Lab	1	
14	Venticall Drying Ovens	Dry environmental samples	Lab		
15	Turbidity meter – Turbidity Analyzer DRT-15CE	Determination of turbidity	Lab Field		
16	HACH COD Reactor Model: 45600-02	Determination of COD in water samples.	Lab		

17	DR/2010 spectrophotometer (HACH)	Analysis of cations, anions, and elements in environmental samples.	Lab Field	1	
18	Cetrifuge Model: Sigma DSC 158C	Used to centrifuge of different samples such as biology, medicine, pharmacology, laboratory, etc. various application	Lab	1	
19	Benchtop Freeze Dryer Labconco Freezone 7750030	Dry environmental sample that involves freezing the product, lowering pressure, then removing the ice by sublimation	Lab	1	
20	UDK 149 distillation (Velp)	Determination of ammonia nitrogen - nitrogen evaporates, the nitrogen content, phenols, acid volatile, cyanide...in environmental samples.	Lab	1	
21	Refrigerators MPR - 925	Used to store the samples and standard solutions	Lab	1	

22	Microwave digestion Ethos D, USA	Digestion samples in different matrices before analysis procedure in the laboratory.	Lab	1	
23	Vacuum Rotary Evaporator Model: HBR4	Used in laboratory for the efficient and gentle removal of solvents from samples by evaporation	Lab	1	
24	Hot magnet stirrer Model: IKA, CMAG 107	To enables high-accuracy temperature control with the standard PT1000 temperature sensor	Lab	1	
25	Sample mill Gindomix GM-200- Retsch	The GRINDOMIX GM 200 Knife Crusher is suitable for grinding samples of candy, cereal bars, cereals, cheese, tablets, cocoa nibs, supplements, dried and fresh fruits, pellets, fish, frozen products, ham, lettuce, meat, nuts, oilseeds, spices, vegetables, etc.	Lab	1	



**Terms of use:**

Under the cooperation agreements that equipments purchased by INTENSE project for study and research are provided at no charge. Payment for using equipment of INEST and consumables is a subject to additional agreement on a case-by-case basis.

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