



Erasmus+



LaWEEEEda

Latin American-European network on waste electrical and electronic equipment research, development and analyses

REPORT

4.4 Improvement of CPD Educational Products



Disclaimer: This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.



Cofinanciado pelo
Programa Erasmus+
da União Europeia

Aviso legal: Projecto financiado com o apoio da Comissão Europeia. A informação contida nesta publicação (comunicação) vincula exclusivamente o autor, não sendo a Comissão responsável pela utilização que dela possa ser feita.



Este trabalho está licenciado sob a LicençaCreativeCommonsAtribuição-NãoComercial-SemDerivações 4.0 Internacional. Para ver umacópiadestalicença, visite <http://creativecommons.org/licenses/by-nc-nd/4.0/> ouenvieuma carta para CreativeCommons, PO Box 1866, Mountain View, CA 94042, USA.



Cofinanciado por el
programa Erasmus+
de la Unión Europea

Renuncia: El presente proyecto ha sido financiado con el apoyo de la Comisión Europea. Esta publicación (comunicación) es responsabilidad exclusiva de su autor. La Comisión no es responsable del uso que pueda hacerse de la información aquí difundida.



Esta obra esta sujeta a la Licencia Reconocimiento-NoComercial-SinObraDerivada 4.0 Internacional de CreativeCommons. Para ver una copia de esta licencia, visite <http://creativecommons.org/licenses/by-nc-nd/4.0/> o envíe una carta CreativeCommons, PO Box 1866, Mountain View, CA 94042, USA.

Project Coordination:



University of Natural Resources
and Life Sciences, Vienna

European Partners:



Latin-American Partners:

Local Coordination in Brazil:



UFRJ



Local Coordination in Nicaragua:



Coordenação de Projeto:



University of Natural Resources
and Life Sciences, Vienna

Parceiros Europeus:



Parceiros Latino Americanos:

Coordenação Local no Brasil:



UFRJ



Coordenação Local na Nicarágua:



Project Coordination:



University of Natural Resources
and Life Sciences, Vienna

European Partners:



Latin-American Partners:

Local Coordination in Brazil:



UFRJ



Local Coordination in Nicaragua:





<p>This Document was prepared by: Este Documento foi elaborado por: Este Documento fue preparado por:</p>	<p>BOKU</p>
<p>Project Working Package/ Pacote de Trabalho / Paquete de Trabajo: WP 3 Responsible Partner Institution: ULSA</p>	<p>Report D4.4</p>



Table of contents

1. Development and improvement of CPD courses.....	11
2. Improvement of training videos.....	14
3. Quality assurance and training materials	17
4. Certification procedure	22
Annex	25



Introduction

This report contains information on the improvements of CPD modules, courses and educational products based on a pilot phase, where the adjusted and new developed educational products were tested in real-life situations. The main target of the WP 4 was to create educational products for non-academic CPD course participants in Brazil and Nicaragua. The modules of the CPD include the following materials:

- CPD courses: lecture style training materials, based on the materials for academic educations, but reduced in complexity and theory background
- WEEE dismantling videos: for 5 product types, videos have been developed describing and showing the process
- Practical dismantling training.

1. Development and improvement of CPD courses


In the pre-project phase it became obvious, although anecdotally different in Nicaragua and Brazil, that there were significant gaps in educational products within the subject of WEEE management. Consequently, many different education products had to be developed from scratch.

During the initial phase of the LaWEEEda project, **gaps and short comings in education** in Nicaragua and Brazil were being identified and the results have been summarised in reports and deliverables of the WP 1. During this phase, it also became obvious that the topics of CPD education had some overlap with academic education. The adaptation and improvement of educational material for CPD courses took place in three phases corresponding with consortium meetings in Hamburg in July 2018, Panama City–Rio de Janeiro in November/December 2018, and a meeting in Sao Paulo in March 2019.

At the **train-the-trainer meeting in Hamburg** in July 2018, a part of the material for both academic education as well as for CPD courses was introduced for the first time to the project consortium. The main focus of discussion of the project consortium during the Hamburg meeting was to establish the criteria for the modification of the academic education materials for CPD purposes.

It was decided that the CPD courses should cover same or similar topic as the academic education, but following these guiding principles:

- The theoretical background of the topics will either be removed if it is concluded in the project consortium that these topics are already known to the professionals working in the field, or will be significantly reduced in size and complexity to fit the demand driven perceptions
- The materials for CPD courses have practical implementation of introduced topics as the core guiding philosophy for their development
- The materials will rely significantly more on photo and video content compared to their academic education counterpart in order to better fit the profile of potential course participants.



During the **train the trainer meeting in Panama City and Rio de Janeiro** in November and December 2018, the preliminary content for all chapters for CPD materials was completed, so that the discussion with project partners was focused on the specific details of the developed courses. During this meeting three different chapters, i.e. Chapter 2.5 on material composition of WEEE, Chapter 2.6 De-pollution and dismantling, and Chapter 3.1 Informal recycling of WEEE were presented and discussed. After detailed presentation of the contents of these chapters, the input from industry partners and cooperatives, i.e. Hunter Metals and ACAMJG, have been proven to be especially valuable at this stage of the CPD material development. Examples of some of the comments and inputs provided by the consortium team are:

- Strong emphasis on the **visual content** of the CPD materials, as it is expected that many participants of the CPD courses have non or very limited literacy
- **Active participation** – where the course trainers are urged to organise CPD courses so that the participants have active roles, such as identifying specific WEEE management related problems and then exemplifying it within the context of local company or local situation
- **“Hands-on” - approach** when teaching the contents of the courses – inclusion as much as possible of the course content through the practical activities, e.g. dismantling, selection and classification of different materials, etc.
- Introduction and interconnection with other already **existing teaching tools** such as Recycling Information Center (RIC) and iFixit website, which provide practical advices and information for mechanical processing of WEEE.

Finally, the **train the trainer meeting in Sao Paulo** in March 2019 was used to showcase the changes and implementations agreed upon during the previous two meetings. Furthermore, the detailed presentation of selected chapters, i.e. Chapter 2.3 Reuse and repair, 2.5 Material composition of WEEE, was presented by future CPD course trainers from the University in Rio de Janeiro (UFRJ) and the University of Sao Paulo (UNESP).



- Figure 1: Presentation of the CPD course by future trainers (1)



- Figure 2: Figure 1: Presentation of the CPD course by future trainers (2)

2. Improvement of training videos

Training videos were developed as one of the essential part of materials developed for the CPD courses. Within the scope of the laWEEEda Project, five different videos depicting correct dismantling procedure for devices most representative of typical devices landing at WEEE recycling facilities, i.e. CRT television, fridge, laptop computer, personal computer (PC), and printer. Beside dismantling procedure, the videos provide also a summary of the material content in these devices with respect to their market values and/or environmental and health hazards.

The videos have been developed in cooperation between D.R.Z. Recycling company and BOKU University Vienna. The preliminary version of videos had been presented during the train the trainer meeting in Hamburg in July 2018. At this meeting, the project consortium agreed on the following improvements:

- Videos should have beside subtitles, also narration in all three languages (English, Portuguese, and Spanish)
- Videos should have the LaWEEEda logo visible during the whole length of the video (see Figure 3)

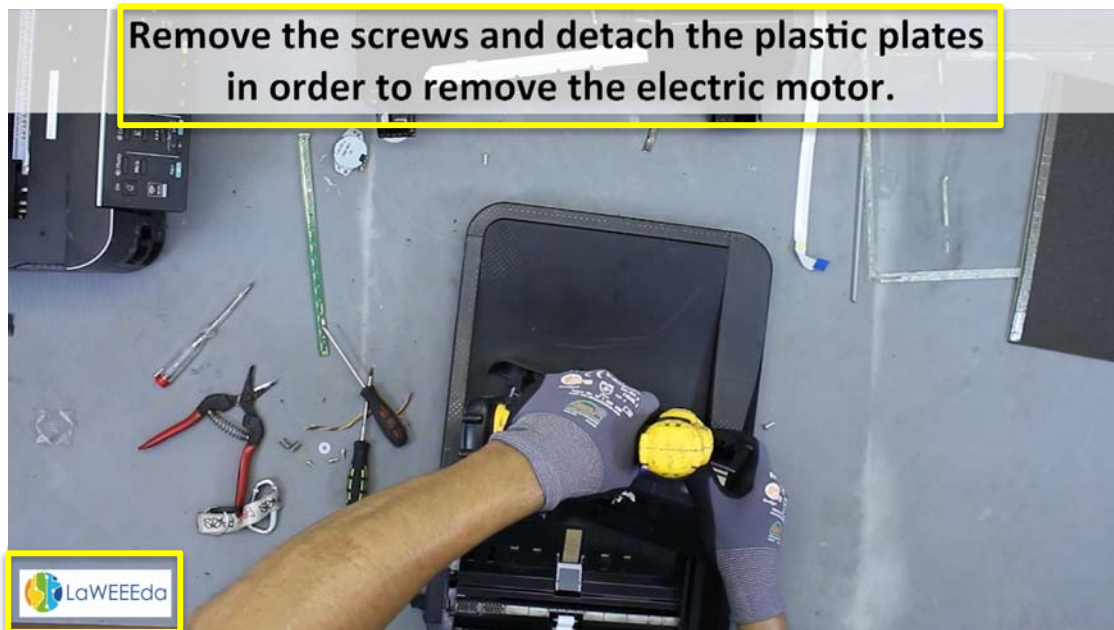


Figure 3: Example of subtitles and LaWEEEda logo, available in three languages depending on the version of the video

- Videos should be classified into segments depending on the procedure. Before each new segment, there should be an intertitle introducing the new segment (see Figure 4)

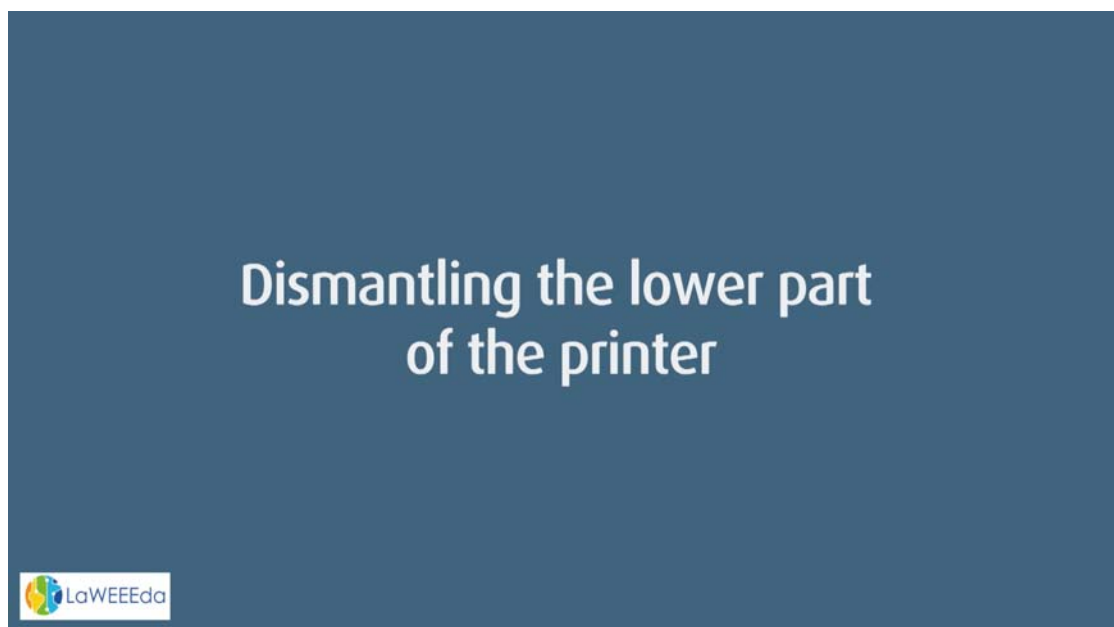


Figure 4: An example of an intertitle

- When presenting the material content of devices, particular materials groups should be specially highlighted (see Figure 4)



Figure 5: Example of highlighting specific material groups of a dismantled device


Proposed improvements and changes suggested during the meeting in Hamburg in July 2018, have been implemented and completed during the next few months. At the train the trainer meeting in Panama City and Rio de Janeiro in November/December 2018, the full versions in all three languages has been transferred to the project partners. Furthermore, the videos are also stored in the LaWEEEda digital repository.

3. Quality assurance and training materials

As a result of the background information provided by working package 1 and the input of stakeholders and academic partners, topics for trainings activities and educational products were identified and discussed by the consortium during the partner meeting in Nicaragua (July 2017). The Latin American partner Universities introduced their intended academic programs and focus groups that should benefit from the teaching and training activities. These included various Bachelors careers (Engineering degree - "Licenciatura"), Masters courses, and training units for academic and non-academic professionals. The European partners thus were enabled to develop the educational products according to the needs of the different target groups identified.

Depending on the national context, there are different regulations on teaching programs in the target countries to be taken into consideration. In **Nicaragua** existing undergraduate careers can only be modified to a certain degree involving a fixed number of hours devoted to a new or modified topic. A long-term modification involving more hours spent on the new topic would involve a lengthy process to get the official permission which potentially could take years. Thus, it was decided to take these limitations into consideration when developing the educational products. Additionally, it was acknowledged that new master's courses that have a focus on e-waste will take two to three years to be officially incorporated into the curricula. The corresponding Universities are in the process of official application and will process the needed requirements in a timely manner in order to integrate the new careers as soon as possible.

In **Brazil**, the national solid waste policy was introduced eight years ago; there was the existence of a sector agreement for some types of waste but not for WEEE. The different states have distinctive management of waste legislation (legislative



autonomy). This makes the environmental licensing process harder, leading to an increase of activities of the informal recycling sector. High demand for waste related services meets an unavailability of the formal sector, giving room to the informal recycling sector.

Nicaragua struggles with the absence of a specific legislation and regulation for WEEE. The development of a guideline is necessary in order to fill this gap and implement proper regulations. Currently there is only one law in existence, defining which waste materials are considered as “hazardous”, but even this has not been implemented. More importantly, there is no specific legislation which regulates WEEE management.

The European partners offered to provide guidelines to help Latin American partners to structure their regulations and WEEE management situation. However, this action requires national inputs from the countries which is a complicated issue right now for Nicaragua, due to the particular political situation that the country is struggling with.

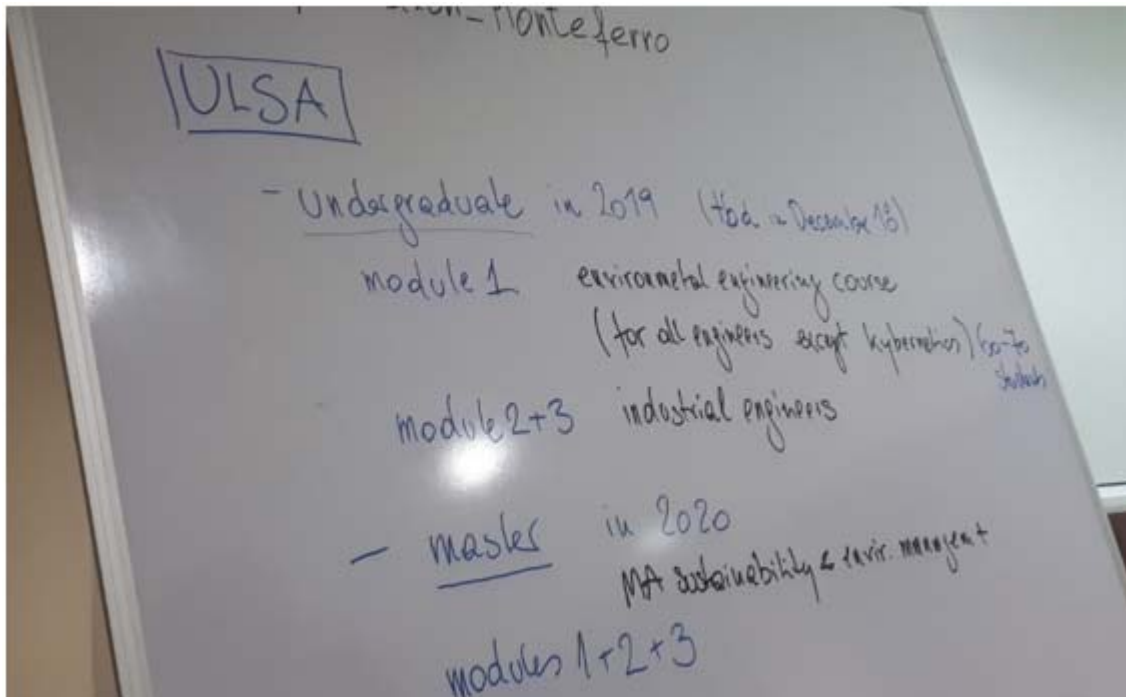
During the train the trainer meeting in Hamburg it was agreed that all partners will review all chapters and give **feedback** by end of August 2018. After receiving the feedback, comments were collected, summarized and passed on to the responsible partner by mid-September 2018 for modification. By mid-November all adaptations and adjustments had been integrated.

Meanwhile the partners in Nicaragua and Brazil had already started translating the different chapters into Portuguese and Spanish, respectively. Preferences were given to the topics to be covered during the workshops in November 2018 meetings: “Development workshop 2” for the Brazilian partners and “Development workshop 3” held in Panama for the Nicaraguan partners in which European teachers and trainers were executing theoretical and practical training sessions for the Latin American partners. With this, a new project phase has been entered: Task 3.4 “Train-the-teacher


in new and adapted higher education products” accompanied by several workshops and webinars.

During the Panama Meeting (November 2018) the partners discussed the advances of the Nicaraguan partners in the implementation of teaching materials into the existing careers and the creation of new careers focussing on electronic waste management.

The ULSA presented the following plan:



According to the plan presented, the ULSA offers in their undergraduate programs (5-year study programs to gain the engineering degree), the contents of module 1 which will be offered to students of all the engineering careers except cybernetics. Modules 2 and 3 will be integrated into the curriculum for industrial engineering students.




Besides the academic courses targeted towards students and professionals, courses will be designed for non-academics, being able to gain additional skills in WEEE-management who will receive a certificate issued by the ULSA University specifying the acquired knowledge and skills. Professionals, i.e. people of all careers who already hold an academic degree in social and engineering sciences will be able to earn a “diplomado”-degree thus certifying the achievement of advanced skills in the area of WEEE-management. The “diplomado”-courses for special topics of WEEE management will be designed in accordance with the areas the target groups focus on in their working environment. The Nicaraguan partners will discuss the contents of classes and workshops with their business partners to assess specific needs.

Nicambiental is planning to undertake activities with young professionals that they have been working with since 2013. Nicambiental and ULSA will thus work out a cooperation and integrate this target group into the LaWEEEda project which will have an impact on the activities of the LaWEEEda project towards changes in the informal sector and their handling of electronic waste.

The **e-tivity teaching technique** allows for transferability of teaching tools between both the academic education and the continuing professional development courses, with the scope or depth of the task being varied (and the instructions written to the appropriate level), taking account of the difference between Masters students creating new dismantling guides and reflecting on new opportunities for value generation and the “diploma students” or “non-academic students”. This means that teaching tools and techniques can be established for the academic education, and then redeveloped with the focus for the target group without academic background and for the CPD courses.

Examples of some of the teaching tools and techniques which provide this interchange are described below with a focus on how they can be applied especially for learners with less or little academic background:

- 
- “think-pair-share approach” which poses a question for individuals to create an answer to, then discuss their own answers in pairs, before finally sharing their combined or contrasting thoughts with the group. This provides an opportunity for peer collaboration and communication in verbal rather than written format;
 - Visualization of learning contents - labelling activities using images rather than text;
 - apply and reflect activities which ask the learners to consider the classroom learning into their own organisation’s or learner’s context centre (recognising PPE required for different activities, then physically locating it within their own organisation’s practice, and identifying what would need to be done to align the theory into their organisation’s practice.)
 - techniques for the implementation of “role changes” between teacher and student
 - trainings in the optimization of competence-oriented teaching and learning

With reference to specific teaching tools, the selection and inclusion of tools such as the Recyclers Information Center (RIC) and iFixit website within the project is deemed appropriate for both the academic education and for the CPD courses due to the combination of images and diagrams accompanying text instructions, the use of visual content increasing the opportunity for participation over pure textual resources (such as technical manuals provided by manufacturers).

A list of the CPD training materials is given in the Annex.

4. Certification procedure

In order to officially recognise the newly developed CPD products in a sustainable way, the report outlines the pathways of **certification procedures** in the respective countries.

Universities in Brazil - UNESP

Non-academic courses offered by Brazilian Universities are classified as Extension courses. Extension is one of the three core responsibilities of Brazilian Universities, according to the Federal Constitution, whilst the other two are Teaching and Research. Extension refers to activities involving the integration with society actors to tackle practical community issues, regardless of producing scientific innovation. Among extension activities, it is possible to offer courses to the open public. There are three types of extension courses, differed according to the total time load: Thematic course (4 - 16h); Knowledge dissemination (16 - 180h), and Improvement (180 - 360h).

At UNESP, Extension activities are linked to the Pro-Rectorry of Extension (PROEX). All UNESP professors have access to a PROEX system, to register the planned extension activities. From the filled in information, you can select if it is a course, and of which kind, and if the course issues a Certificate. When an extension course is registered as such, all participants will receive a valid certificate by UNESP. So far, LaWEEEda courses at UNESP have been of the "Knowledge dissemination" type.

UNESP as a University under Brazilian law has the right to issue certificates to course attendances, this is also valid for the LaWEEEda CPD courses.

Universities in Brazil - UFRJ

For UFRJ, basically the same applies (1st paragraph).

The Pro-Rectorry of Extension (PR5/UFRJ) System is called SIGProj (Sistema de Informação e Gestão de Projetos / Information and Project Management System). AU UFRJ LaWEEEda has been registered in the PR5/UFRJ System since May 2018.

The registration includes certificates emission for the students and also for staff (teachers). The screenshots show the registration. An example for certificates is given in the Annex.

PR5 - Pró-reitoria de extensão - x SIGProj - Sistema de Informação - x

sigproj.ufjf.br/sieux.php?id=7&plataforma=1&acao=1#

BRASIL

Simplificar Participe Acesso à informação Legislação Contato

Inicio **Extensão** Pesquisa Estudos e Mais

Bem-vindo! Ricardo Julian de Silva Graça

Avisos

Mantenha o seu cadastro sempre atualizado!

Últimas Mensagens

Proposta submetida com sucesso

NOTA DO COMITÊ PROFAEX 2019

NOTA DO COMITÊ PROFAEX 2019

(48) mensagens não lidas!

Minhas Propostas em Elaboração

Projeto - Capacitação e Pesquisa em Desenvolvimento de Resíduos Eletroeletrônicos 2019-2021 (Cópia) 01-02-2020

Curso - Introdução à Lógica de Programação (Cópia) 01-02-2020

Curso - EDITAL PROFAEX Nº 22/2019 - Gestão de cooperativa na agricultura familiar (RUA) (Cópia) 05-02-2019

Projeto - RUA 2017.2 - Apoio a cooperativas de energia solar

Minhas Propostas Submetidas

13.03.2019 - Introdução à Lógica de Programação

18.03.2019 - Capacitação e Pesquisa em Desenvolvimento de Resíduos Eletroeletrônicos 201...

13.03.2019 - Capacitação e Pesquisa em Desenvolvimento de Resíduos Eletroeletrônicos

Título - Capacitação e Pesquisa em Desenvolvimento de Resíduos Eletroeletrônicos

Edital - RUA 2018.2

Coordenador - Ricardo Julian de Silva Graça

Modalidade - Projeto

Enviado em - 18.03.2018

Protocolo - 208561.1888.34878.18032018

Situação - Proposta recomendada - EM ANCIAMENTO - NORMAL

Ações de Consultar ações

Dados Pessoais

Analisar Cadastro

Analisar Currículo Letado

Alterar Senha

Serviços

Carteira Eletrônica

Redigir Mensagem

Ver Tópicos

Aplicativos

Formulários

Normas UFJF

Tabelas

Área de Contato - CNPJ

Modalidade de Extensão

Descrição de Impostos

Listas de Extensão

Área Resposta

Observações - Elaboração de...

Diretores de Extensão

Áreas Temáticas

Esquema

13:51 31/03/2020

PR5 - Pró-reitoria de extensão - x SIGProj - Sistema de Informação - x

sigproj.ufjf.br/sieux.php?id=7&plataforma=1&acao=1#

BRASIL

Simplificar Participe Acesso à informação Legislação Contato

Inicio **Extensão** Pesquisa Estudos e Mais

Bem-vindo! Ricardo Julian de Silva Graça

Avisos

Mantenha o seu cadastro sempre atualizado!

Últimas Mensagens

Proposta submetida com sucesso

NOTA DO COMITÊ PROFAEX 2019

NOTA DO COMITÊ PROFAEX 2019

(48) mensagens não lidas!

Minhas Propostas em Elaboração

Projeto - Capacitação e Pesquisa em Desenvolvimento de Resíduos Eletroeletrônicos 2019-2021 (Cópia) 01-02-2020

Curso - Introdução à Lógica de Programação (Cópia) 01-02-2020

Curso - EDITAL PROFAEX Nº 22/2019 - Gestão de cooperativa na agricultura familiar (RUA) (Cópia) 05-02-2019

Projeto - RUA 2017.2 - Apoio a cooperativas de energia solar

Minhas Propostas Submetidas

13.03.2019 - Introdução à Lógica de Programação

18.03.2019 - Capacitação e Pesquisa em Desenvolvimento de Resíduos Eletroeletrônicos 201...

13.03.2019 - Capacitação e Pesquisa em Desenvolvimento de Resíduos Eletroeletrônicos

Título - Capacitação e Pesquisa em Desenvolvimento de Resíduos Eletroeletrônicos

Edital - EDITAL PROFAEX 2019

Coordenador - Ricardo Julian de Silva Graça

Modalidade - Projeto

Enviado em - 18.03.2018

Protocolo - 208561.1888.34878.18032018

Situação - Proposta RECOMENDADA pela UNIDADE GERAL

Ações de Consultar ações

Dados Pessoais

Analisar Cadastro

Analisar Currículo Letado

Alterar Senha

Serviços

Carteira Eletrônica

Redigir Mensagem

Ver Tópicos

Aplicativos

Formulários

Normas UFJF

Tabelas

Área de Contato - CNPJ

Modalidade de Extensão

Descrição de Impostos

Listas de Extensão

Área Resposta

Observações - Elaboração de...

Diretores de Extensão

Áreas Temáticas

Esquema

13:56 31/03/2020

Universities in Nicaragua

The process for the certification for CPD course is as follows:

ULSA does not need external support to certificate any course, it is an internal process recognized by the Higher Institution for Education in Nicaragua. Furthermore, ULSA can include in alliance any other institution to support the certification.

The person coordinator in charge of the program has to register every course independently at the ULSA Academic Secretary with the approval of the higher authority in the university. The registration process should include a structured formal document with the most important information to support the certification. The document includes the following main topics:

- An official title of the course.
- Substantiation and Goals
- Expected Outcomes
- Methodology and Teachers
- Economical Sustainability
- Certification type (including whether certification is supported by other alliance)
- Skills of the professional profile
- Target group and Requirement of enrolment
- Content of the course, duration, credit point, dates
- Budget and financing

Once the course is registered, the students will be able to enrolment and then at the end, the teacher can add the records of certification.

For those students with records above of 69/100 point, will obtain the certification of qualification with the official title, the duration, dates and the signature of all institution enrolment in the teaching course, as well as a registration code of the certification that includes a web link to check if the document issued by the university is true.

Annex

Certificate from UJRJ



UNIVERSIDADE FEDERAL DO RIO DE JANEIRO
CENTRO DE TECNOLOGIA
ESCOLA POLITÉCNICA
LABORATÓRIO NERDES - CENTRO DE TREINAMENTO LAWEEEDA



CONTEÚDOS ABORDADOS

- Impactos Ambientais;
- Composição de REEE;
- Legislação e Setor Informal;
- Coleta e Logística Reversa;
- Introdução à Elaboração de Planilhas Eletrônicas;
- Uso da Ferramenta STEP;
- Importância do Reuso e Reparo;
- Resíduos perigosos;
- Uso adequado de Equipamentos de Proteção Individual (EPI) para desmontagem de REEE;
- Desmontagem Segura de REEE;
- Introdução à Manutenção de Eletroeletrônicos;
- Layout de uma Planta de REEE;
- Formas de Reciclagem.

Rio de Janeiro, 27 de Julho de 2019.


Ricardo Jullian da Silva Graça

Coordenação do LaWEEEDA da UFRJ



UNIVERSIDADE FEDERAL DO RIO DE JANEIRO
CENTRO DE TECNOLOGIA
ESCOLA POLITÉCNICA
LABORATÓRIO NERDES - CENTRO DE TREINAMENTO LAWEEEDA



CERTIFICADO

Certificamos que _____ concluiu o curso de **Reciclagem de Eletroeletrônicos: Desmontagem e Manutenção**, realizado no período de **22 de Julho a 26 de Julho de 2019**, com carga horária total de **32 horas**. O curso foi promovido pelo **Centro de Treinamento LaWEEEDA**, estando devidamente registrado na Pró-Reitoria de Extensão da UFRJ.

Rio de Janeiro, 27 de Julho de 2019.


Ricardo Jullian da Silva Graça

Coordenação do LaWEEEDA da UFRJ



List of CDP training materials

CPD Module I - WEEE management Key principles in e-waste management		Lecture hours
Policy and legislation for e-waste	Key principles: International aspects (e.g. Basel Convention etc.); European examples, Brazilian / Nicaraguan specifics	1,5
Sources and generation of e-waste	WEEE categories incl. typical items, types of e-waste generators	1
Reuse and repair	Reuse business models, repair - organisational setup, techniques, legal aspects (waste vs. product)	1
Collection and take-back systems	Formal and informal collection systems, retail, take-back by producers	1,5
Material composition of different WEEE categories	Components, materials, valuable contents, hazardous material	2,5
Dismantling and de-pollution	General aspects of depollution and dismantling	1,5
Mechanical processing	Fragmentation, separation, plant design	1
Specific treatment processes	Cathode ray tubes, flat panel displays, cables, lamps, printed circuit board treatment	1,5
Final treatment - recycling	Ferrous metals, non ferrous metals, aluminum, plastics	1
Final treatment - disposal	Hazardous wastes , waste for disposal: Technologies, impacts etc., storage	1,5
Total:		14
CPD Module II - WEEE management Business planning and entrepreneurship in the field of e-waste		Lecture hours
Financial aspects - Costs and markets	Costs by processes, markets by materials, revenues	2
Informal sector activities	Collection, typical treatment processes, emissions and impacts, integration strategies	1,5
Business plan development and entrepreneurship	Joint lecture with different disciplines, start-up planning, collection of entrepreneurial ideas in the field of e-waste, special focus: socio-economic enterprises	4
Plant layout	Examples of how to design various units in WEEE treatment plants	3
Total:		10,5
Practical dismantling modules		Lecture hours
Module Temperature exchange equipment	Refrigerators, Freezers, Air conditioning equipment	7
Screens and monitors	Screens, Televisions, Monitors, Laptops, Notebooks	7
Large equipment	Washing machines, Clothes dryers, Dish washing machines, Electric stoves	7
Small equipment	Vacuum cleaners	7
Small IT and telecommunication equipment	Microwaves, Irons, Toasters, Clocks, Radio sets, Video cameras, Video recorders, Hi-fi equipment	7
	Mobile phones, GPS, Pocket calculators, Routers, Personal computers, Printers, Telephones	7
Total:		35