

## UPGRADE THE WEBSITE OF NUCLEAR TRAINING CENTER FOR ONLINE TRAINING

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**Abstract:** In 2016, Nuclear Training Center (NTC) proposed the task of improving and upgrading NTC website's technology for better performance, more attractive interface and more accessible information to site visitors.. This website will be designed to meet the demand for integrated online training site, integrated training management page later. For this task, it is expected to build a website with full modules, English interface of website and especially, the professional website to apply online training technology and tightly integrated close to the present site of a nuclear training center.

**Keyword:** *website, moodle, e-learning,*

### **1. INTRODUCTION**

Since its establishment, one of the first and foremost NTC's functions is to assist VINATOM in managing and coordinating PhD programs with specialization authorized by the Ministry of Education and Training and joint programs with partner universities in providing Master's degrees, in the preparation of R& D human resources in atomic energy field. To support the implementation of the work assigned, [www.daotaohatnhan.com.vn](http://www.daotaohatnhan.com.vn) site was designed and has been put into operation since 2010. The website has been an official channel of NTC in providing training materials, guidelines and scientific knowledge exchange. For the past years, compared to the latest trends and developments, it is noticed that NTC website has a number of problems which need to be fixed.

Establishing a website is one of the important tasks for NTC in order to promote and publicize its activities (in both Vietnamese and English). The active and open relationships with students and local as well as international organizations help to prepare the human resource for Nuclear power as well as the other related applications.

The website will be the information source of management plans and contents of Nuclear Science and Technology training programs. Website will be a good source for students and professors to find and share the teaching documents as well as references quickly at a low cost (most of the books, syllabuses and references from the Center will be provided for free).

### **2. CONTENT**

**Task 1:** Upgrade Vietnamese website of Nuclear Training Center

- Analysis the advantages and disadvantages of the current website

- Design a new interface of the website
- Edit and unified interface design according to the feedback,
- Programming, website building, transfer data from the old website to the new website
- Update all news, all notifications generated by a nuclear training center in 2016, the agency referral information, etc.

**Task 2:** Analysis, design and construction of e-learning page integrated in website with new technologies at Nuclear Training Center

- Analysis of the transmission request information online at the Nuclear Training Center
- Design and develop user interfaces necessary items in the training modules online.
- Create a test course on a new nuclear training interface website

**Task 3:** Build English interface website of Nuclear Training Center

- Design English website of Nuclear Training Center
- Edit and unified interface design according to the feedback
- Programming and building the website
- Transfer some news articles, translation agency referral information.
- Post news, updates of Nuclear Training Center in 2016 on the site in English interface.

**Completed product**

- Vietnamese interface website has been modified and upgraded of the Nuclear Training Center
- E-learning page of the Nuclear Training Centre has the basic functions of online learning.
- English interface website of the Nuclear Training Center

**2.1. Task 1: Vietnamese interface of the Nuclear Training Center’s website**

With the assigned tasks in management activities of the Nuclear Training Centre, we have designed the site [www.daotaohatnhan.com.vn](http://www.daotaohatnhan.com.vn) and put into operation since 2011. The website has provided nuclear information in Vietnam and overseas, the website provided document, study guides and Knowledge Exchange environment.

In the old interface, the site was designed with two main colors, blue and red, based on the two primary colors in the logo of the nuclear training centre. The main menu contained the categories: home, about, news, programs, announcements, documentation, books & textbooks, FAQ and contact.

Statistics of traffic and downloads the information of the site as of the end of the year 2016 were as follows:

Category	Quantity	Viewed
World news	112	12452
Domestic news	453	169354
Events - Seminars	40	67108
Nuclear technology news	132	89546
Partnership news	4	3266

Statistics of documents, books, textbooks:

<b>Category</b>	<b>Quantity</b>	<b>Downloaded</b>
Document Sciences	66	1764
Documents	2	156
Training Plan	0	0
E-book	5	1257
Syllabus	6	768

The site has good activities for the purpose of disseminating basic news and providing materials to the readers. However, with this interface, over many years, undergoing many changes of technology, we noticed the site has had a number of defects and has missed a few functions, leading to lack of performance in the active transmission of information to readers via the internet as:

- The website has several pages of the information which has not been reasonably classified. As a result, The site lacks many functions serving for the transmission of information
- There is no educational modules, online training, discussion, questions and answers, online learning.
- The website lacks some modules which provide information such as information on legal documents; list of portfolio projects, public procurement; lack of links to the other electronic portal; lack of access diagram page.
- Frequency of updates and provide information at a slower pace.
- There is no an English site interface
- Much serious vulnerability was mentioned by Computing Center of Ministry of Science and Technology.

In order to have a website look more professional and fixed those problems, NTC has opened two meetings to collect the NTC staff comments and technology experts' suggestions. After the two meetings, the IT staff of the NTC has synthesized these requirements, constructive feedback of the entire staff and some experts in the IT field and upgrade a home page interface (homepage) with new functionality to meet the requirements of most of NTC staff

Some images of the product:



VIỆN NĂNG LƯỢNG NGUYÊN TỬ VIỆT NAM

# TRUNG TÂM ĐÀO TẠO HẠT NHÂN

NUCLEAR TRAINING CENTER

Tiếng Việt | English

Nhập nội dung cần tìm

Tìm kiếm

Trang chủ
Giới thiệu
Tin tức
Đào tạo - Nghiên cứu
Thư viện - Tài liệu
Văn bản - Biểu mẫu
Đào tạo trực tuyến
Thông báo
Liên hệ






Trung tâm Đào tạo hạt nhân là đơn vị sự nghiệp trực thuộc Viện Năng lượng nguyên tử Việt Nam thực hiện chức năng Đào tạo và huấn luyện cán bộ khoa học công nghệ, kỹ thuật viên ngành năng lượng nguyên tử; thực hiện các hoạt động đào tạo trong nước, phối hợp và tổ chức các hoạt động đào tạo ngoài nước.




**TIN TỨC**



**Khai giảng khóa đào tạo, bồi dưỡng kiến thức cho cán bộ đi đào tạo sau đại học tại liên bang nga lần thứ ba**

**SỰ KIỆN**

18

Hội thảo "Phát triển nguồn nhân lực..."

MONTH 10

11:43 - 11:43

Hội trường tầng 3

11

Khai mạc hội nghị khoa học và c...

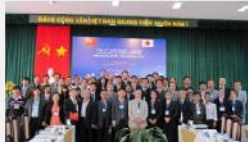
**THÔNG BÁO**

- » THÔNG BÁO V/v bảo vệ luận án tiến sĩ Hóa học của Viện Năng lượng nguyên tử Việt Nam (14/12/2016 04:13)
- » THÔNG BÁO Về việc bảo vệ luận án tiến sĩ của Viện Năng lượng nguyên tử Việt Nam (14/12/2016 04:12)
- » THÔNG BÁO V/v bảo vệ luận án tiến sĩ Hóa học của Viện Năng lượng nguyên tử Việt Nam (14/12/2016 04:12)
- » THÔNG BÁO V/v tham gia khóa học Toshiba về Công nghệ nhà máy điện hạt nhân (14/12/2016 04:12)
- » THÔNG TIN VỀ HỌC BỔNG PHCENIX CỦA ĐẠI HỌC HIROSHIMA, NHẬT BẢN (14/12/2016 04:11)
- » THÔNG BÁO TỔ CHỨC HỘI NGHỊ VIỆT-NHẬT LẦN THỨ (14/12/2016 04:11)

Trang chủ
Giới thiệu
Tin tức
Đào tạo - Nghiên cứu
Thư viện - Tài liệu
Văn bản - Biểu mẫu
Đào tạo trực tuyến
Thông báo
Liên hệ

**ĐÀO TẠO - NGHIÊN CỨU**

**ĐÀO TẠO NGHIÊN CỨU SINH**



**Danh sách giảng viên cơ hữu của Viện Năng lượng nguyên tử Việt Nam**

- » CHƯƠNG TRÌNH ĐÀO TẠO TRÌNH ĐỘ TIẾN SĨ CHUYÊN NGÀNH: VẬT LÝ LÝ THUYẾT VÀ VẬT LÝ TOÁN (16/12/2016 04:32)
- » Chương trình đào tạo trình độ tiến sĩ chuyên ngành: Vật lý nguyên tử (16/12/2016 04:36)
- » Khóa đào tạo đặc biệt về kỹ thuật hạt nhân cho công trình, lắp đặt và vận hành nhà máy điện hạt nhân (16/12/2016 04:36)

**KHÓA HỌC NGẮN HẠN**



**Chương trình đào tạo trình độ tiến sĩ chuyên ngành: Vật lý nguyên tử**

- » Khóa đào tạo đặc biệt về kỹ thuật hạt nhân cho công trình, lắp đặt và vận hành nhà máy điện hạt nhân (16/12/2016 04:36)
- » Lễ bảo vệ luận án tiến sĩ cấp cơ sở của nghiên cứu sinh Bùi Minh Lộc (10/10/2016 09:31)
- » Khóa học cơ bản về an toàn hạt nhân (10/10/2016 09:27)

**LIÊN KẾT ĐÀO TẠO**



**Khóa đào tạo đặc biệt về kỹ thuật hạt nhân cho công trình, lắp đặt và vận hành nhà máy điện hạt nhân**

- » Tập huấn công tác phòng cháy chữa cháy (10/10/2016 09:30)
- » Khóa học cơ bản về an toàn hạt nhân (10/10/2016 09:27)

**HOẠT ĐỘNG NGHIÊN CỨU KH**



**Tập huấn công tác phòng cháy chữa cháy**

- » Thủ trưởng phạm công tác làm việc với viện năng lượng nguyên tử Việt nam về đề án 1558 (10/10/2016 09:29)

**THÔNG TIN ĐÀO TẠO**

**HƯỚNG DẪN VỀ MOODLE**

- Sử dụng Module Choice (11/10/2016 10:28)
- Sử dụng Module Chat (11/13/2016 10:26)
- Hướng dẫn sử dụng Moodle ( bằng video) (11/10/2016 10:25)

**CÁC KHÓA ĐÀO TẠO CỦA NTC SỬ DỤNG MOODLE**

- Sử dụng Module Choice (11/10/2016 10:28)
- Sử dụng Module Chat (11/13/2016 10:26)
- Văn bản hợp tác với các đơn vị trong và ngoài nước (11/10/2016 02:21)

**CÁC CHƯƠNG TRÌNH ỨNG DỤNG**

- Sử dụng Module Choice (11/10/2016 10:28)
- Sử dụng Module Chat (11/13/2016 10:26)
- Quy định đào tạo của Viện NLNT/VN (11/10/2016 02:21)

**CÁC KHÓA ĐÀO TẠO TRỰC TUYẾN CỦA ANSN, IAEA**

- Sử dụng Module Choice (11/10/2016 10:28)
- Sử dụng Module Chat (11/13/2016 10:26)
- Quy định đào tạo của Viện NLNT/VN (11/10/2016 02:21)

**THÔNG TIN HỘI NGHỊ - HỘI THẢO**

**Lễ công bố, trao quyết định bổ nhiệm các vị trí lãnh đạo cấp phòng tại Tr...**  
Sáng ngày 6/7/2016, Viện Năng lượng nguyên tử Việt Nam (Viện NLNT/VN) và Trung tâm Đào tạo hạt nhân tổ chức Lễ công bố và trao quyết định của Viện trưởng Viện

**Khai giảng khóa đào tạo, bồi dưỡng kiến thức cho cán bộ đi đào tạo sau...**  
Sáng ngày 27/6/2016, Viện Năng lượng nguyên tử Việt Nam (Viện NLNT/VN), Trung tâm Đào tạo hạt nhân tổ chức Lễ khai giảng khóa đào tạo, bồi dưỡng kiến thức

**VĂN BẢN - BIỂU MẪU**

**QUY ĐỊNH - QUY CHẾ**

- Quy chế chi tiêu nội bộ (11/10/2016 02:22)
- Quy chế dân chủ cơ sở (11/10/2016 02:22)
- Quy chế hoạt động của Trung tâm (11/10/2016 02:22)
- Văn bản hợp tác với các đơn vị trong và ngoài nước (11/10/2016 02:21)

**MẪU ĐÀO TẠO, NHIỆM VỤ KHCN**

- Mẫu nhiệm vụ cố vấn nước (11/10/2016 02:32)
- Mẫu nhiệm vụ cơ sở (11/10/2016 02:32)
- Mẫu đề tài cấp nhà nước (11/10/2016 02:31)
- Mẫu đề tài cấp Bộ (11/10/2016 02:31)
- Mẫu đề tài cơ sở (11/10/2016 02:31)

**MẪU VĂN BẢN NỘI BỘ**

- Thủ tục bổ nhiệm cán bộ (11/10/2016 02:34)
- Thủ tục liên quan đến bảo hiểm (11/10/2016 02:34)
- Thủ tục liên quan đến tài chính: Hợp đồng (11/10/2016 02:33)
- Thủ tục hành chính: Các mẫu công văn, báo cáo, quyết định và trình thẩm định (11/10/2016 02:33)

## 2.2.Task 2: E-learning page of the Nuclear Training Centre with the basic functions of online learning

E-learning has marked a new landmark in applying information and communication technologies in the field of education and training. This is the advanced and comprehensive training methods, which has the ability to connect and share knowledge very effectively. E-learning is becoming the trend and attracts the attention especially of the countries of the world. NTC realized the site was missing this core functionality in the past years. Consequently, the visitors of the website of the NTC have not had a centralized place to exchange knowledge, learning materials directly between people with and technical support, knowledge of NTC staff as well as the faculty members collaborate with NTC at the live site in NTC. With the integrated e-learning page into the site of a nuclear training centre, NTC hope will make easy in convenience for the communication exchange knowledge of everyone in the entire Vietnam atomic energy industry, and the web site [www.daotaohatnan.com.vn](http://www.daotaohatnan.com.vn) will be the trusted site, more popular for people to love the field of Atomic Energy.

The e-learning page of NTC was built to manage the training, sharing resource, information for students and another person. The site serve the students participating in the training hosted by NTC, students, curriculum teachers, training managers and people to learn information about nuclear energy.

E-learning site of Nuclear Training Center will be built with the following main characteristics:

- The e-learning page can help build the course, common knowledge courses.

- Suitable for 100% online classes as well as support for traditional classes, build courses with multiple forms combined.

- Simple to use, flexible and efficiency structure; friendly interface; easy to install and configure.

- List of courses are presented full details, can allow visitors to or require a password to access.

- Support for multiple courses in the same system.

- Online comment (chat)

- Forum

Function:

a. Management system

b. User manage

c. Course manage

d. The module creates interactive resources

Resources in Moodle are interactive resources that users can interact with documents, (answer the question, enter text, upload files to)

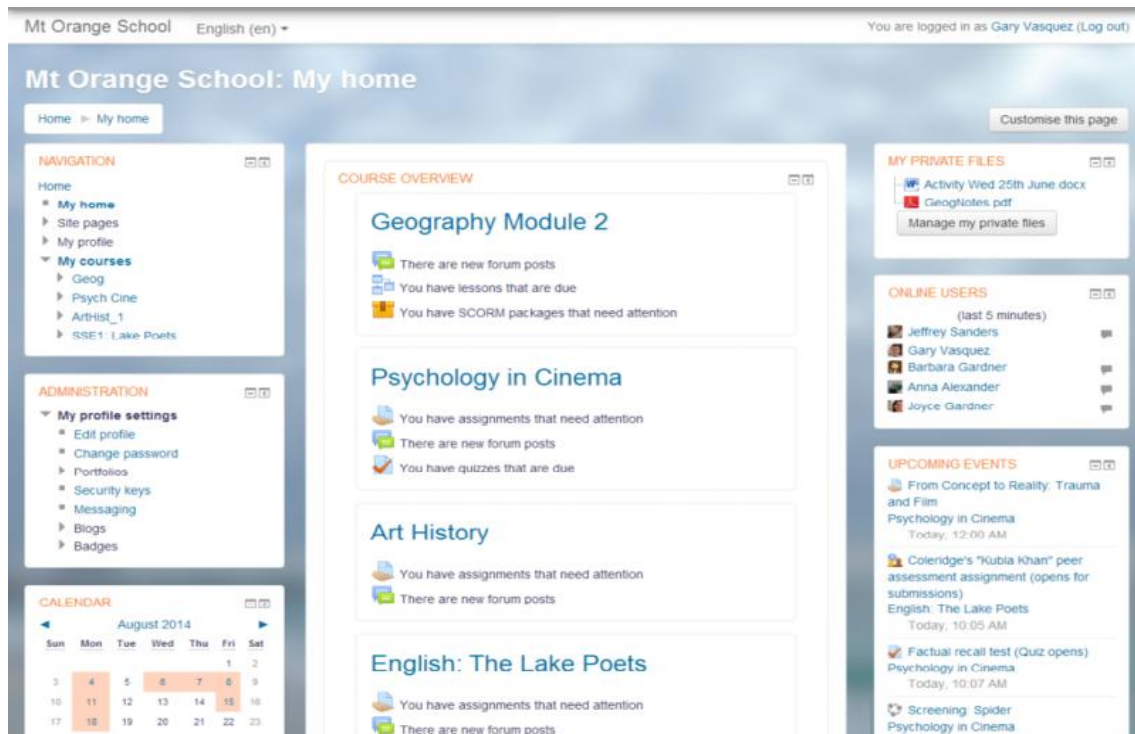
e. The modules generate resources to interact with others

These resources help students and teachers can interact, exchange and discuss:

- Online comment (chat)

- Forum

Some illustrates image of the product:



### 2.3.Task 3: English interface of the Nuclear Training Center's website

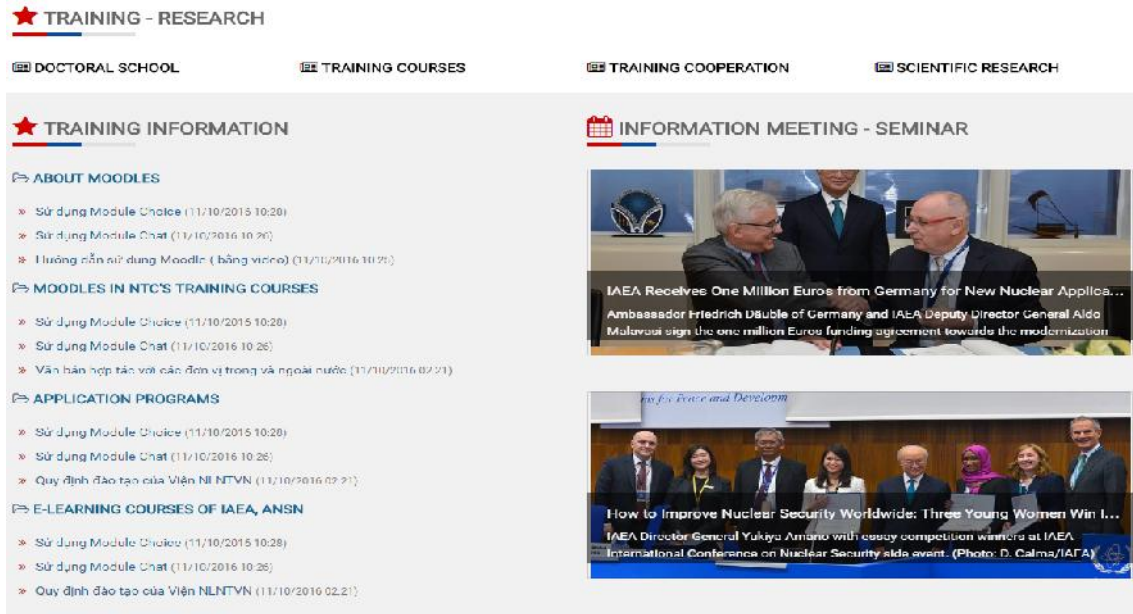
Nuclear Training Center noticed a great interest from foreign visitor. Therefore, miss an English interface website operation with Vietnamese interface website that limit the transmission of information to a global audience interested in the field of nuclear energy in Vietnam in general and NTC in particular. The information is presented in Vietnamese is not enough to visitors in the world. So, in the basic task in 2016 year of Nuclear Training Centre, we have proposed to build an English interface website of NTC as the main content and very important. English interface site of NTC hopes to become an accurate information channel, rich and useful for reader in English in global. NTC hopes to provide fully information required of the nuclear energy, in regular news on the English interface website.

In the process, the NTC has opened many meetings. The NTC's staff and IT professionals unite the English interface website as follows:

- Basically, the English interface site will almost the same Vietnamese interface site and 100% of the content will be made by the international language is English.
- This site is designed with separate domain names. The content will be completely independent of the content of Vietnamese page.
- Some information content as news, important announcements in the operation of NTC and VINATOM and the nuclear energy industry in the world will be edited, translate and post up to this site.

Some illustrates image of the product:

The screenshot shows the website interface for the Nuclear Training Center. The header features the logo of the Vietnam Atomic Energy Institute and the text "VIETNAM ATOMIC ENERGY INSTITUTE" and "NUCLEAR TRAINING CENTER". There is a search bar and a language selector (Tiếng Việt | English). The navigation menu includes: Home, About us, News - Events, E&T - Research, Library - Publications, Legal documents - Forms, E-learning, Announcement, Contact. The main content area displays a large image of a lecture hall with a speaker at a podium and an audience. Below this is a text box describing the center's role: "Nuclear Training Center is affiliated business units Atomic Energy Commission of Vietnam to implement the function: Education and training of scientific and technological personnel, technicians atomic energy industry, implementation of training activities in the country and coordinate and organize the training activities abroad." To the right, there are smaller images of a group of people and a nuclear reactor. The bottom section displays a list of news items with dates and titles in Vietnamese.



### 3. CONCLUSION

Based on the workload and explanations, we believe that our tasks were completed as registered. All the requirements for a communication channel, a website were brought to the users. Our website provided information about nuclear physical science news, organizing plans and contents of nuclear science and technology training courses. The website is stable, easy to use; interface structure is clear and logical which meet the criteria from Nuclear Training Center.

News module keeps on updating, uploading the internal and corporate news from the center as well as the fullest and latest news, events, meetings from all the areas related to nuclear issues from local and international

English interface of the website has presented enough basic information about leadership, and operational direction of the Nuclear Training Centre.

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