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Code of Practice
for the preparation of applicants of higher education degree
of the Doctor of Philosophy at the university level
Hanoi University of Science and Technology

This COP is for PhD program of HUST. Under MOU between Hanoi University of Science and Technology and Ho Chi Minh University of Natural Resources and Environment, signed on 26th March 2021, this COP will be applied for INTENSE school in Vietnam.

Prerequisites and normative base at the state level.

Vietnam Law on Education dated June 14, 2019;

Vietnam Amended Law on Higher Education dated November 19, 2018

Vietnam Law on Higher Education dated June 18, 2012

Circular 08/2017/TT-BGDĐT by the Vietnam Ministry of Education and Training (MOET) promulgating the Regulations on Admission and Training for Doctorate Levels (2017)

Conditions of the preparation of applicants of higher education degree of the Doctor of Philosophy at the university level.

REGULATIONS ON ORGANIZATION AND MANAGEMENT OF POSTGRADUATE TRAINING, according to Decision No. 2764/QĐ-ĐHKB-SĐH dated August 28, 2017, of the Rector of Hanoi University of Science and Technology

In HUST

32 specialties of the third (educational-scientific) level of higher education
(2020)

32 PhD programs with national codes can be found on the website

<https://en.hust.edu.vn/doctor-programs>





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<https://drive.google.com/file/d/1-qmMpPtK7e9otgPpPlp2MXzBXmLuCkNq/view?usp=sharing>

PhD program in Environmental Engineering is coded 9520320

Academics / Graduate Programs / Doctoral Programs

DOCTOR PROGRAMS

No.	Programs	School
1	Maths and Informatics	School of Applied Mathematics and Informatics
2	Maths	
3	Biotechnology	School of Biotechnology and Food Technology
4	Food Technology	
5	Postharvest technology	
6	Chemical Engineering	School of Chemical Engineering

Documentation has been developed for each educational program:

✓ Description of the educational program

<https://www.hust.edu.vn/chuong-trinh-dao-tao>

✓ Curriculum

<http://sdh.hust.edu.vn/home/default.aspx?scid=23&CategoryID=137&nid=2267>

✓ Curriculum (correspondence education) – Environmental Engineering

<https://ctt-daotao.hust.edu.vn/Upload/SDH/files/ChuongtrinhdaotaoNCS/2018/9520320%20Ky%20thuat%20moi%20truong.pdf>





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Entry requirements for a Doctor of Philosophy degree studies (as of 2021).

Regulated by the Hanoi University of Science and Technology (HUST)

Admission Rules for the postgraduate and doctoral studies (2021)

<https://www.hust.edu.vn/tuyen-sinh-nghien-cuu-sinh>

<https://ts.hust.edu.vn/tin-tuc/thong-bao-tuyen-sinh-dao-tao-trinh-do-tien-si-nam-2021>

1. Applicants who have completed a master's degree *can be admitted to study* at the University for the degree of Doctor of Philosophy

Eligibility Conditions:

Candidates for doctoral training must meet the following conditions:

- 1) Possessing a master's degree in a relevant discipline, a relevant discipline, or a discipline close to the field of application, or having a bachelor's degree with excellent grades or higher in the same or relevant industry.
- 2) Being the author of 01 article or report related to the field of study to be published in a scientific journal or the proceedings of a specialized scientific conference or seminar with peer review within 3 years (36 months), up to the date of registration;
- 3) Having an English certificate of IELTS 5.0 or equivalent

2. *Fees, funding, and scholarship for preparation of specialists* in the post-graduate course of the University is regularly informed on the website. Scholarships are available from various sources from Government, projects, funds of individuals and/or legal entities.

<https://ts.hust.edu.vn/b/hoc-phi-hoc-bong>

Funding of research support for graduate students and doctoral students

https://ctt-daotao.hust.edu.vn/Upload/SDH/files/VanBanQuyChe/2020_12_08_Quy_dinh_ho_tro_nghien_cuu.pdf





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3. **Entrants** to the postgraduate study *apply* to the admission committee, in which they indicate the specialty, the school, the prospective supervisor, and other documents.

<https://ts.hust.edu.vn/tin-tuc/thong-bao-tuyen-sinh-dao-tao-trinh-do-tien-si-nam-2021>

4. **Entrance examination** for admission to studies for the degree of a Doctor of Philosophy consists of:

1. Based on the candidate's application documents, qualifications and research directions, the Head of the Institute/School proposes the specialized sub-committees and members of each sub-committee and submits it to the Chairman of the Admission Council for decision.

2. Specialized subcommittees for the admission of Ph.D. candidate are responsible for:

a. Organize the review and evaluation of the candidate's application, outline the research intention and the quality of presentation, and debate around the candidate's research intention.

b. Rank the candidates according to the level of excellent, good, average, or not (candidates meet the requirements for admission when 4/5 members agree to be classified as average or higher).

c. Send the results to the Secretariat to summarize and report to the Admission Council.

d. The Admission Council shall stipulate the principles of admission and determine the list of successful candidates based on the enrollment quotas decided by the Principal for each training branch and the results of the classification of candidates, and submit them to the Rector for approval.

5. **Procedural deadlines.**

PhD candidate recruitment is performed around the year

The educational process is carried out according to the regulation on organization and management of postgraduate training, according to Decision No. 2764/QĐ-ĐHKB-SĐH dated August 28, 2017, of the Rector of Hanoi University of Science and Technology.

<http://sdh.hust.edu.vn/home/default.aspx?scid=23&CategoryID=144&nid=1939>





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Specifics. PhD students must spend at least 12 months of continuous study at Hanoi University of Science and Technology in the first 24 months from the date of issuance of the decision to recognize PhD students. During the first 2 years, PhD candidate must deepen their knowledge of philosophy, foreign language and specialty disciplines (mandatory and by the choice of a postgraduate student). At the same time, postgraduate students conduct the research within the topic of the thesis.

The training period of the Doctor of Philosophy is **3 years for candidates with a master's degree, 4 years for candidates with a bachelor degree.**

Conditions of the preparation and defense to receive the Doctor of Philosophy degree

- PhD candidates should fulfill additional modules upon request to support them with sufficient knowledge and expertise to carry out research projects.
- PhD candidate should fulfill doctoral modules related to the core knowledge at a high level of the specialty i.e. in-depth content suitable for PhD topics, interdisciplinary topics, or training of research methodology and, how to write scientific articles.
 - Presented 3 PhD topics and literature review at the seminar with approval
 - Have at least 1 publication in scientific journals in Scopus/ISI list related to research topics
 - Presented thesis at the Department seminar with comment

The defense of thesis can take place at permanently operating Specialized Councils in 2 steps:

Grassroot level:

When the PhD student fully meets the conditions specified in Clause 2, Article 97 of this Regulation, the Head of the Department, the supervisor, the Faculty send a written request to carry out the procedures and submit to the Rector for decision establishment of a grassroots level thesis evaluation council.

University level (public defense)





Based on the conclusions of the Grassroots Thesis Evaluation Council AND consent results of two independent/blind examiners, the Education Office compiles a dossier and submits it to the Rector for a decision to allow the PhD student to defend the University-level thesis.

The council is formed by speciality for which the institution of higher education (scientific institution) has a license for conducting educational activities at the third (educational-scientific) level of higher education.

Procedure of expertise and defense for obtaining a Doctor of Philosophy degree is classified in detail in the **regulation on organization and management of postgraduate training**, according to Decision No. 2764/QĐ-ĐHKB-SĐH dated August 28, 2017, of the Rector of Hanoi University of Science and Technology

<http://sdh.hust.edu.vn/home/default.aspx?scid=23&CategoryID=144&nid=1939>

Public announcement of the thesis before defense

The screenshot shows a web browser window with the URL ctt.hust.edu.vn/DisplayWeb/DisplayBaiViet?baiviet=38025. The page content includes:

- Người hướng dẫn khoa học:**
 - PGS. TS. Vũ Đức Thảo
 - GS. TS. Lê Minh Thắng
- Cơ sở đào tạo:** Trường Đại học Bách khoa Hà Nội
- TÓM TẮT KẾT LUẬN MỚI CỦA LUẬN ÁN**
 - Áp dụng thành công phương pháp muối nóng chảy trong tổng hợp xúc tác đa oxit Co-Cu/ than hoạt tính, silica gel và MCM-41.
 - Xúc tác có khả năng oxy hóa metan và toluene với hiệu suất cao tại điều kiện thí nghiệm có thể áp dụng trong việc xử lý VOCs nhằm bảo vệ môi trường.
 - Xúc tác SS-M10Co được xác định có hoạt tính cao nhất với metan với độ chuyển hóa 93,5% tại 450oC. Xúc tác WI-AC5Co5Cu có thể oxy hóa hoàn toàn toluen tại nhiệt độ 180oC trong quá trình nhả hấp phụ. Xúc tác với thành phần 3% Co và 7% Cu trên chất mang MCM-41 có thể oxy hóa hoàn toàn toluen tại 400oC.
- Name of dissertation:** Low temperature catalytic oxidation of volatile organic compounds (VOCs) over the catalysts of CuO-Co3O4 on supports
- Major:** Environmental engineering **Code No:** 9520320
- Name of PhD. Student:** Ngô Quốc Khánh
- Advisors:**
 - Assoc. Prof. Dr. Vũ Đức Thảo
 - Prof. Dr. Lê Minh Thắng
- Training Institution:** Hanoi University of Science and Technology
- Summary of new contributions of the Dissertation**
 - Successfully synthesize the catalyst of bimetallic oxides on several supports (Activated carbon, Silica gel and MCM-41.) by applying the solid-solid blending method.
 - These catalysts oxidize methane and toluene with high catalytic activities at experimental conditions leading to potential application for environmental protection.
 - The catalyst of SS-M10Co is recorded as the highest catalytic activity with methane with the conversion of 93,5% at 450oC. The catalyst of WI-AC5Co5Cu can completely oxidize toluene in desorption process at 180oC. The catalyst with 3% cobalt and 7% copper on MCM-41 can totally oxidize toluene in direct oxidation at 400oC.



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Additional services
public announcement

<http://sdh.hust.edu.vn/home/Default.aspx?scid=23&CategoryID=117&nid=2724>

Documents templates

<http://sdh.hust.edu.vn/home/Default.aspx?scid=23&CategoryID=131>

