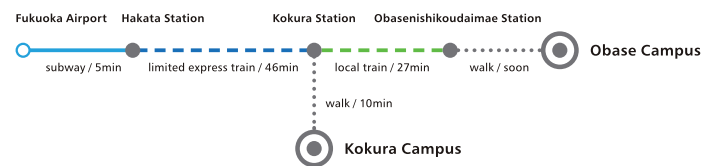
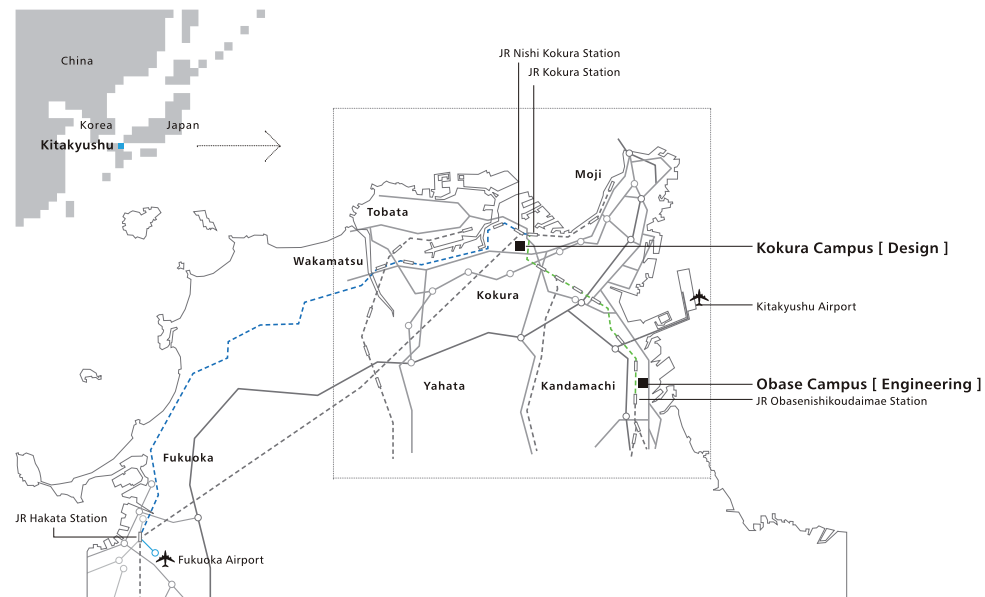


NISHINIPPON INSTITUTE OF TECHNOLOGY

INFORMATION BROCHURE



NISHINIPPON INSTITUTE OF TECHNOLOGY

OBASE CAMPUS [The Faculty of Engineering] , 1-11 Aratsu, Kandamachi, Fukuoka 800-0394

Access: Take the Airport Line of the subway from the Fukuoka Airport, get off at Hakata Station and transfer to the JR limited express train bound for Oita. Get off at Kokura. Transfer to the JR Nippo line and get off at Obasenishikoudaimae Station. The campus is close by.

KOKURA CAMPUS [The Faculty of Design] , 1-2-11 Muromachi, Kokura Kita-ku, Kitakyushu, Fukuoka 803-8787

Access: Take the Airport Line of the subway from the Fukuoka Airport, get off at Hakata Station and transfer to the JR limited express train bound for Oita. Get off at Kokura. The campus can be reached in 10 minutes on foot.

<http://www.nishitech.ac.jp/>

Phone +81-930-23-1491 Fax +81-930-24-7900



おばせキャンパス [工学部] 〒800-0394 福岡県苅田町新津1-11
 アクセス ◎ 福岡空港から地下鉄空港線を利用して「博多」駅で降り、JR (大分行き特急列車) で「小倉」へ。
 JR日豊本線 (大分方面) に乗り換え。「小波瀬西工大前」駅で降りてすぐ

小倉キャンパス [デザイン学部] 〒803-8787 福岡県北九州市小倉北区室町1-2-11
 アクセス ◎ 福岡空港から地下鉄空港線を利用して「博多」駅で降り、JR (大分行き特急列車) で「小倉」へ。徒歩10分



Evaluation Results
 In fiscal 2007 the Nishinippon Institute of Technology (NIT) was recognized as meeting the standards for post-secondary institutions as established by the Japan University Accreditation Association, an evaluation organization certified by the Minister of Education, Culture, Sports, Science and Technology.

大学評価
 西日本工業大学は、学校教育法で定めている認証評価を、平成19年度に認証評価機関である財団法人大学基準協会に申請し「大学基準に適合している」と認定されました。



N ISHINIPPON **I** NSTITUTE OF **T** ECHNOLOGY

Welcome to NIT

With its Faculties of Design and Engineering, the Nishinippon Institute of Technology (NIT), which is located in the City of Kitakyushu in Fukuoka Prefecture, Japan, has placed great importance on its relationship with the region since its founding over 40 years ago.

The university has benefited greatly from the region and a variety of the university's research results have directly benefited the area.

The university is determined to continue its unwavering commitment to social responsibility through its education and research efforts.

We sincerely hope that students who want to share this commitment will come and further their education at NIT.

ようこそ、西日本工業大学へ。
工学部とデザイン学部を有する本学は、日本の福岡県北九州市という場所において、開学以来40年以上にわたり、地域との繋がりを大切に、地域に学び、そして数々の研究成果を地域に還元しながら歩んでまいりました。今後も、その姿勢は変わることなく、教育研究を通じた社会貢献を、しっかりと果たしていくつもりです。そんな本学のことを、少しでも興味を持っていただければ嬉しく思います。



What is NIT?

Investing in Humanity, Pioneering New Technologies

人を育て技術を拓く

FOUNDER'S PHILOSOPHY | 建学の理念

Through its broad range of content-rich education and research, NIT is developing an elite class of industrial engineering and design professionals possessing exemplary character.

人間性に支えられた高度な工業技術者を、広く学術の研鑽を通じて育成する

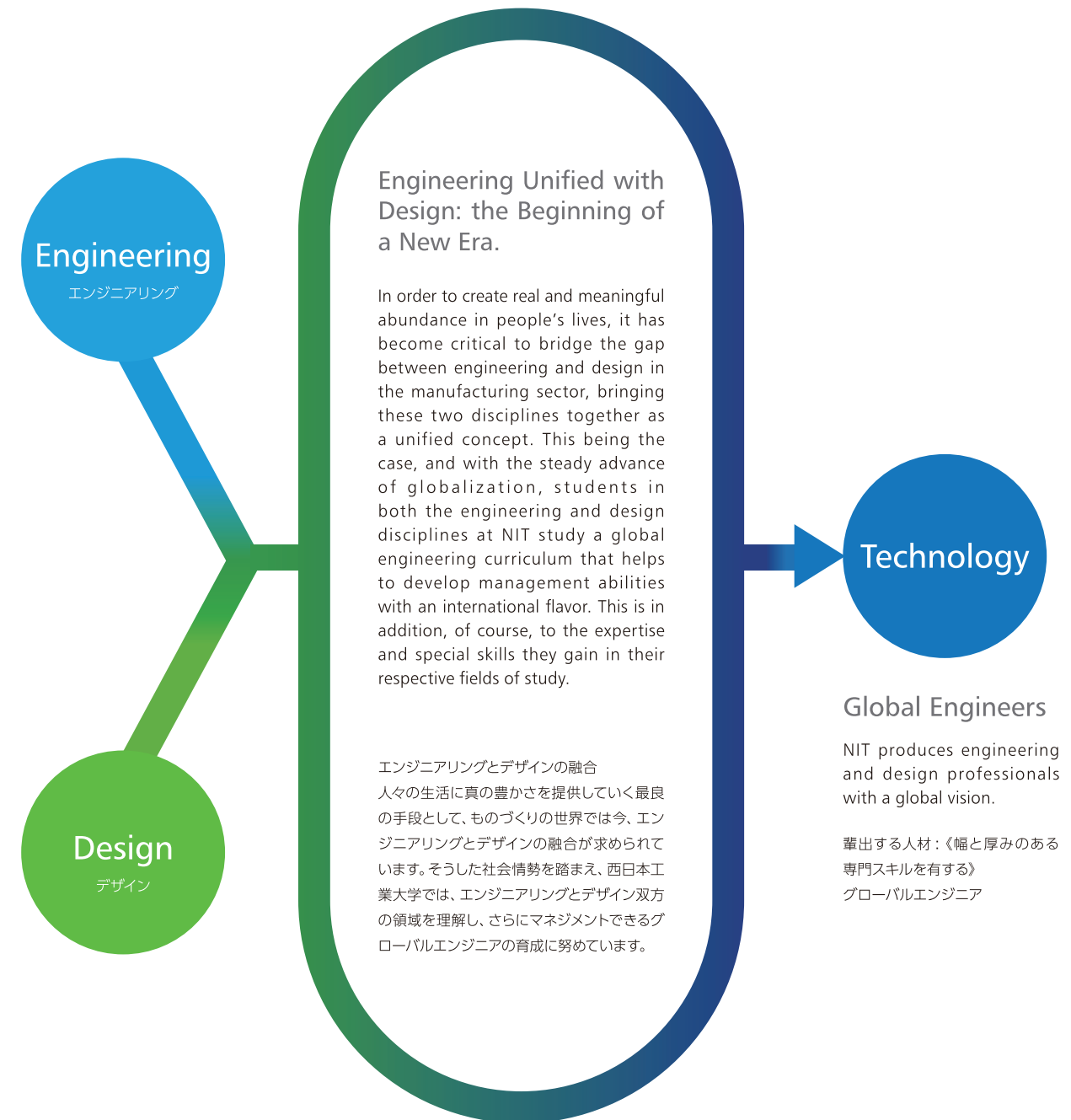
EDUCATIONAL GOALS | 教育の目的

1. To develop exemplary character in our students so that they become outstanding members of society
2. To develop an elite class of industrial engineering and design professionals who will be respected and trusted on the international stage
3. To develop engineering and design professionals possessing the self-confidence and vitality to tackle the challenges presented by yet unknown fields
4. To disseminate NIT's vision of the future to the world

1. 豊かな人間性の練成とすぐれた工業技術者の育成
2. 国際社会で、職場で尊敬され、頼りにされる高度技術者の育成
3. 未知の分野に立ち向かうことの出来る気力と自信を持った技術者の育成
4. 世界に向かって「夢」を発信する西日本工業大学の建設

Professional Qualities That Will Be Critical to the 21st Century Engineer and Designer

西日本工業大学が、社会に輩出していきたい人材とは…?





Firmly Rooted in Kitakyushu

Blessed with world-class facilities, the campuses of the Faculties of Engineering and Design at NIT are at the forefront of efforts to promote regional cooperation and collaboration between industry, government and academia. The Graduate School and Regional Cooperation Center were established in Kokura in April 2009, resulting in a concerted effort to establish even more stable coordination with area businesses. NIT is spreading its fields of activity beyond its campuses to include all of Kitakyushu.

北九州の土地に根づく

西日本工業大学では、工学部、デザイン学部ともに、それぞれの置かれた立地環境を存分に活かし、数々の地域連携・産官学連携の取り組みを行っています。2009年4月には、小倉に大学院・地域連携センターを新設し、今まで以上に地元企業との連携を強化しています。キャンパスだけでなく北九州市そのものが私たちの活動のフィールドになっています。

BOASTING A STRONG PRESENCE IN THE FIELD OF AUTOMOTIVE INDUSTRY

OBASE AREA



The site of the NIT Faculty of Engineering, the Obase district in Kanda Town makes up the seaside industrial area, whose development has centered on the automotive, cement and electric power industries. The surrounding area boasts a combined land, sea and air distribution infrastructure consisting of the Higashikyushu Expressway – Kanda Kitakyushu Airport interchange, the Port of Kanda, an international harbor, as well as the Kitakyushu Airport. This infrastructural presence is unprecedented in Japan. Especially noteworthy is the remarkable buildup of the automotive industry in recent years – the Nissan Motor Kyushu plant and the Toyota Motor Kyushu Kanda plant are now up and running – that has resulted in the area being transformed into a massive automotive industry hub in Northern Kyushu.

北九州の自動車産業集積地—おばせ

本学工学部が位置する苅田町・おばせ地区は、自動車・セメント・電力等を中心とした臨海工業都市として発達しているエリアで、東九州自動車道苅田北九州空港インターチェンジ、国際貿易港苅田港、北九州空港と、全国的にも類を見ない陸海空の複合的な物流インフラが整備された町でもあります。特に近年は、自動車産業の集積が著しく、日産自動車苅田工場やトヨタ自動車九州苅田工場なども操業を行っており、まさに北部九州の自動車産業を牽引する拠点となっています。

THE CULTURAL CENTER OF KITAKYUSHU

KOKURA AREA



Historic street fronts and cutting-edge architecture coexist harmoniously in Kitakyushu. This is especially evident in Kokura-kita ward, the commercial and cultural center of Kitakyushu and the home of the NIT Faculty of Design. The area became heavily polluted with the increased presence of heavy industry that reached its pinnacle in the 1960s but the city and its residents, as well as the private sector, joined together behind a variety of environmental improvement initiatives and, as a result, pollution is now largely a thing of the past. Now well-known all across Japan for its recycling industry that utilizes the technology that played such a key role in this process, as well as for the cutting-edge research being advanced in other fields related to the environment, Kitakyushu is often referred to as “the green city”.

北九州文化の中心拠点—小倉

歴史ある町並みと最先端の建築群が同居する小倉。特に本学デザイン学部が位置する小倉北区は、商業、文化において北九州市の中核をなすエリアです。かつては1960年代を頂点に、重工業産業の肥大により公害の多発地帯となった時期もありましたが、市全体で環境改善に取り組んだ結果、それも克服しました。今では、その過程で培った技術を活かしたリサイクル産業や環境関連分野の研究における最先端の街として全国的に知られるようになり、「環境の街」とも呼ばれています。



THE FACULTY OF ENGINEERING | 工学部 |

OBASE CAMPUS



While the automotive industry enjoys strong representation in the area surrounding the Obase Campus, recently the robotics industry has also increased its presence in the area, creating a very dynamic environment. Against this backdrop, the Faculty of Engineering is dedicated to the training of a workforce equipped to develop technology capable of moving people and creating a more abundant society (The department is especially focused on 3-D CAD technology acquisition). Moreover, targeting ordinary citizens, the department is also committed to training coordinators for environmental ESD (Education for Sustainable Development) issues with the idea of raising awareness regarding the environmental conservation efforts that have been indispensable to the wide-ranging technological developments of recent years.

工学部「おばせキャンパス」周辺は、自動車産業を筆頭に、最近ではロボット分野の企業進出も活発化しています。本学では、向学心を高めてくれる、そんな理想的な環境の中、人々に驚きと感動を与え、より豊かな社会を生み出すテクノロジーを開発する力の育成を行っています（なかでも3次元CADの技術習得には力を注いでいます）。また近年の各種技術開発で必須とされる環境保全への意識も高めるべく、環境ESDコーディネータの育成にも力を入れています。



THE FACULTY OF DESIGN | デザイン学部 |

KOKURA CAMPUS



The Faculty of Design is located in Riverwalk Kitakyushu, a large-scale complex that can be thought of as the hub for the dissemination of information regarding the culture of Kitakyushu (Well-known architect Michael Graves designed the campus). With this invigorating environment serving as inspiration, the Faculty of Design is working with regional businesses, local government and other stakeholders to implement a wide range of initiatives. Furthermore, while always striving to remain in touch with the public, the Faculty of Design is training a talented corps of design professionals who will help produce a more abundant society through the planning of urban centers and public areas, as well as the creation of information technology-driven design.

デザイン学部は、北九州文化の発信基地ともいえる大型複合施設「リバーウォーク北九州」内にキャンパスがあります（キャンパスのデザインは著名な建築家マイケル・グレイヴス氏によるものです）。そんな感性を刺激してくれる環境の中、本学部では、地域の企業や行政等と連携しながらさまざまな取り組みを実施しています。社会との接点の中で、都市や空間の設計、また情報技術を駆使したデザインの制作等を通じ、より豊かな社会を生み出すための技術者を育成しています。



NIT Learn with Region

For Kitakyushu, With Kitakyushu

We at NIT are very much aware of how fortunate we are to have our campuses located in an area that is so rich in information and culture, and which possesses such a strong manufacturing presence. It is for this very reason that we consider it our core mission to apply the results of our daily research efforts for the benefit of society. We place particular importance on positively impacting local industry and culture by working closely with local government and businesses as well as local citizens, and we are proactively implementing various types of research and other initiatives on this front. The scope of these efforts is very broad, covering such areas as industrial product design, architecture, the visual arts, environmental conservation, urban development and media design.

北九州のために、北九州とともに

西日本工業大学は「ものづくり」および情報・文化の集積エリアにある大学として、その恩恵による日々の研究成果を社会に還元していくことこそ大切な使命と考えています。とりわけ地域産業と文化の発展に貢献することを目的に、行政や企業、さらには地域住民との密な交流の中、さまざまな研究・取り組みを積極的に行っています。その活動の範囲は、工業製品のデザインから、建築、映像、環境保全、まちづくり、さらにはメディアデザインの分野にまで多岐にわたっています。

PARTNERSHIPS パートナーシップ

THE REGION'S INDUSTRIES | 地域産業

Committed to making a meaningful contribution to the development of the region's industries, NIT is proactively engaged in cooperative research and development activities with local industry. The university is stepping up to the plate when it comes to such matters as resolving the issues faced by various local businesses, developing new technology designed to implement promising new ideas and disseminating new information.

西日本工業大学では、地域産業の発展に貢献すべく、産学協同による研究開発にも積極的に着手しています。各種企業が抱える課題の解決や実用化に向けた新技術の開発、さらには新しい表現の発信などに挑んでいます。

A BROADER SOCIETY | 広域社会

With the theme of "think globally, act locally", NIT is sponsoring lectures and other events targeted to the general public as it addresses the various problems facing modern society. The university is also throwing its weight behind volunteer activities in cooperation with various NPOs.

現代社会が抱える諸問題を「地球的視野で考え地域で実践する」をテーマに、一般市民を対象とした講座の開催やイベント等を実施しています。さらには各種NPO法人との連携によるボランティア活動にも力を注いでいます。

LOCAL GOVERNMENT | 地域行政

At the behest of local government, NIT is enthusiastically carrying out projects in cooperation with industry and the government. The areas covered by these efforts include everything from new technological developments designed to stimulate local industry to landscaping efforts and urban planning.

西日本工業大学では、地域行政からの依頼による産官学連携によるプロジェクトも盛んに行っています。そのフィールドは、地場産業を活性化させる新しい技術開発からランドスケープ、都市計画にまで及んでいます。

LOCAL SOCIETY | 地域社会

With the goal of tackling local social issues and harnessing the results of these efforts for the benefit of the region, NIT is placing a high degree of importance on its relationship with local residents pursuant to efforts to implement a broad range of initiatives, including schemes to promote urban development, industrial initiatives and environmental conservation efforts.

地域社会の問題に取り組み、その成果を地域に役立てることを目的に、西日本工業大学では地域住民との交流を第一に、まちづくりや産業の振興、環境保全にいたるまで、さまざまな取り組みを行っています。

■ Please see page 13 for details regarding the faculties and departments of study introduced on pages 8 – 11. P.08 ~ 11 の事例で紹介する学部学科の名称・内容については、P.13 をご参照ください。

NIT × The Region's Industries

| THE FACULTY OF ENGINEERING | 工学部 |

case 01

THE PRACTICAL USE OF ELECTRIC CARS TO REDUCE CO₂ EMISSIONS

CO₂の削減化に向けた電気自動車の実用化研究



In the Department of Digital Engineering (Ikeda Research Laboratory), cooperative efforts between industry and academia are producing a vast amount of research in the areas of next-generation automobiles. One of these research areas addresses possibly the biggest hurdle facing the electric automobile: making high-speed battery charging a reality while doubling the present cruising range provided by a single charge. This collaborative research has also been selected for the Ministry of Economy, Trade and Industry's *Teitanso Shakai ni Muketa Gijutsu Hakkutsu / Shakai Shisutemu Jissho Moderu Jigyo* ("Technological Discovery and Social Systems for a Low-Carbon Society: a Demonstration Test Model Project"). If this research is successful in its aims, it is anticipated that it will lead to drastic reductions in CO₂ emissions.

デジタルエンジニアリング学科(池田研究室)では、産学連携による数々の次世代自動車の研究を進めています。その一つが電気自動車の最大の課題である高速充電と、1回の充電による航続距離を現状の2倍まで向上させる研究です。この共同研究は経済産業省の「低炭素社会に向けた技術発掘・社会システム実証モデル事業」にも採択されており、これが実用化されれば、飛躍的なCO₂の削減につながることでしよう。

Other Important Research / その他の研究

- Joint research and development of outdoor automated guided vehicles (AGV) (With the Kyushu plant of Nissan Motor Co., Ltd.) / 屋外無人搬送車 (AGV) の障害物センシングシステム共同開発研究 (日産自動車九州工場)
- Development of a servo manufacturing system for thin-walled pipe created by a swing roller-based construction method (Matsumoto Industry Co., Ltd.) / スイングローラー工法による薄肉パイプ製品のサーボ加工システム開発 (松本工業株式会社)
- Research concerning automation and automatic detection of waste fluid and wastewater treatment for high quality fuel purification facilities that utilize used cooking oil with good production characteristics (EcoNet Co. Ltd.) / 高品質で生産性の高い廃食用油再生燃料精製プラント製造における廃液・廃水処理のオートメーション化と自動判別に関する研究 (株式会社エコネット)

| THE FACULTY OF DESIGN | デザイン学部 |

case 02

A NEW FORM OF TRANSPORTATION: THE UNIVERSAL VEHICLE

新しい乗り物「ユニバーサルビークル」のデザイン



Developed by the Veda International Robot Research & Development Center, Rodem is a type of universal vehicle. NIT's Department of Design & Media (Kimura Research Laboratory) played a prominent role in the design of this universal vehicle. The greatest merit of Rodem is that it can be used by a broad range of users, including everyone from the elderly and physically challenged. Another important feature is the fact that it can also be used as an electric cart or wheelchair. When used as a wheelchair, the user can gain access to it from the rear as well, meaning that it is accessible from a bed or similar location. Another important characteristic is the fact that the user can utilize the vehicle in such a way that he/she is at the same eye level as a healthy person, which has led to it gaining much attention on the international stage.

ベダ国際ロボット開発センターにより開発されたユニバーサルビークル [Rodem]。そのデザインを情報デザイン学科(木村研究室)が手がけました。最大の特長は健康者から高齢者、身障者まで、電動カートとしても電動車いすとしても利用できることです。特に車いすとしては、後ろから乗り込めることでベッド等からの移乗がスムーズにできます。また健康者と同じ目線での移動も可能になるなど、海外からも熱い注目を集めています。

Other Important Research / その他の研究

- Collaborative research concerning the Penta-ocean Non-Welding method (high strength bolts) (with Penta-Ocean Construction Co., Ltd.) / PNW工法 (高力ボルト)に関する共同研究 (五洋建設株式会社)
- Joint testing and research into wood panel stressed-skin effects (with Misawa Homes Co., Ltd.) / 木質パネルのストレススキン効果に関する共同実験・研究 (ミサワホーム株式会社)
- Establishment of the Shabondama Project, which involves collaborative research and classes covering product development (Shabondama Soap Co., Ltd.) / 共同研究・商品開発授業を設け「シャボン玉プロジェクト」(シャボン玉石けん株式会社)
- Creation of computer graphics for TV documentaries on natural science (NHK Enterprises, Inc.) / 自然科学番組ドキュメンタリーにおけるCG制作 (株式会社NHKエンタープライズ)

case 03 ENVIRONMENTAL EDUCATION INITIATIVES TARGETING CITY RESIDENTS
市民を対象とした環境教育の取り組み



Currently NIT is engaged in the *Education for Sustainable Development Coordinator Training Program*. This scheme has been selected as a contemporary 'Good Practices' program. NIT has become a hub for the program, and, through its efforts in the area of environmental education, the university is enthusiastically developing professionals equipped with the skills necessary to make a positive contribution to the creation of both a sustainable region as well as a sustainable society. Educational efforts are not restricted to university students, but rather include a broad segment of the local population; with its focus on youngsters and students, the general public is well represented in this program of environmental studies and hands-on learning.

西日本工業大学では現在、環境教育において「持続可能な地域および社会づくり」に貢献できる人材を育成していく拠点となるべく、「現代GP (Good Practice)」に選定された「環境ESD(Education for Sustainable Development)コーディネータ育成プログラム」に取り組んでいます。環境学習や体験学習などのプログラムには、地域の児童・生徒を中心に多くの一般市民も参加しています。本学学生だけにとどまることなく、幅広い人材の育成に努めています。

Other Important Activities / その他の取り組み

- Public lectures and observation tours of an industrial legacy, the Shirakawa Power Station / 産業遺産 白川発電所に関する公開講座・現地見学会の開催
- The holding of the East Asia Environmental ESD Forum 2009, which covered utilization of the bountiful nature of the Keichiku region for collaborative education purposes / 京菜地域の自然を活用した連携教育をテーマにした「環境ESDフォーラム2009」開催
- The holding of environmental learning events that heighten awareness regarding the relationship between the ocean and marine resources / 海や水産資源との関わりを育む環境学習会の開催

case 04 GRAPHICS SUPPORT FOR PINK RIBBON ACTIVITIES
ピンクリボン運動をグラフィックの面から支援



Pink Ribbon activities are part of a global campaign aimed at eradicating breast cancer through early stage health screenings and educational efforts. Intent on seeing these activities take root in Kitakyushu, students in the Department of Design & Media (Takayanagi Research Laboratory) are doing their part by creating printed matter and other communications tools. Of special note is a pamphlet created by students that contains illustrations providing easy-to-understand instructions on how to carry out self-examinations for breast cancer. Created to appeal to ordinary citizens, a popular character appearing in the pamphlet is currently being displayed as art on Kitakyushu monorail cars.

乳癌の撲滅、検診の早期受診啓蒙のために行われている世界規模のキャンペーン「ピンクリボン運動」。その運動を北九州市に根づかせようと、デザイン学部情報デザイン学科の学生たち(高柳研究室)が印刷物の作成等を通じて奮闘しています。自己検診の方法をイラストでわかりやすく解説したパンフレットを制作しています。特に市民に親しんでもらおうと考えられたキャラクターは大好評で、都市モノレールのラッピング車両にも使用されています。

Other Important Activities / その他の取り組み

- Participation in the Design Development Workshop sponsored by the Fukuoka Industrial Design Association / 福岡県産業デザイン協議会のデザイン開発ワークショップへの協力
- Creation of the Hyaku Mannin no Kyandorunaito (One Million Person Candle Night) motif for the Riverwalk Kitakyushu commercial complex / 商業施設「リバーウォーク北九州」における「100万人のキャンドルナイト」イベントのモチーフ制作
- Creation and display of a monument dedicated to the environment, which was designed and created using EcoPer, a toilet paper made from recycled paper / 再生トイレットペーパー「エコーパー」を使ってデザインした、自然環境を表現するモニュメントを制作・展示
- Assistance in the design of earthenware displaying the Chinese zodiac that is sold by Hikari Kogeisha, a sheltered work facility for the mentally challenged / 知的障害者授産施設「ひかり工芸舎」が販売する干支土鈴デザイン支援

case 05 THE IMPLEMENTATION OF QUALITY ASSURANCE FOR AUTOMOTIVE PARTS
自動車部品の品質確保。コストの削減・納期の短縮等を実現する画期的研究



At NIT, we have achieved impressive results in the area of R&D for dies. An example of this can be seen in our research related to utilizing intelligent dies to get rid of metal presswork of imperfections. Carried out by students in the Department of Digital Engineering (Sakata Research Laboratory), this research is aimed at incorporating QCD into automotive components. Moreover, the Sakata Research Laboratory has also been entrusted with an important role in the Ministry of Economy, Trade and Industry's *Tool & Die Engineer Training Project*. Fukuoka Prefecture has set out with plans to promote itself as the automobile manufacturing capital of northern Kyushu, with a production goal of the order of 1.5 million automobiles. Along with the prefecture's automotive industry, NIT is in charge of management and administration of this training project, which is aimed at developing engineering and design professionals.

西日本工業大学は、金型研究開発における高い実績を持っています。例えば、デジタルエンジニアリング学科(坂田研究室)での、自動車部品へのQCDの作り込みを目指した金型の知能化による金属プレス加工の不良低減の研究などがあり、また経済産業省の「金型技術者人材育成事業」も受託しています。「北部九州自動車150万台生産拠点推進構想」を掲げる福岡県および県内の自動車関連企業とともに、技術者養成に向けたプロジェクトの管理・運営まで担当しています。

Other Important Research and Activities / その他の研究・取り組み

- Development of a practical three-dimensional measuring device (in collaboration with the Kitakyushu Foundation for the Advancement of Industry) / 北九州市産業学術推進機構と実用型三次元測定器の開発
- Holding lectures to promote establishment of the automotive industry in Kanda Town / 刈田町の自動車産業振興に向けた講演開催
- Holding workshops for the Yukuhashi City Automobile Industry Promotion Conference / 行橋市自動車産業振興協議会の研修会開催

case 06 DESIGNING A SOCIAL WELFARE FACILITY THAT IS BOTH FUNCTIONAL AND BEAUTIFUL
機能性と美しさを備えた独創的な福祉施設の建築設計



The NIT Department of Architecture has been commissioned by the regional government to work on a number of buildings. One of these buildings is the Miyawaka Health and Welfare Center (Nishioka Research Laboratory). Of special interest is the fact that the Architecture course has adopted a new and innovative construction method for what can be thought of as a modern type of pit dwelling that utilizes earthen walls that have been planted with vegetation. These structures are warm in winter and remain cool in summer, but this functionality is not their only merit: they also retain the unique beauty of traditional Japanese architecture, and have also gained recognition in the region from a design perspective due to their superlative environmental construction.

建築学科では、地域行政の依頼に応じ数々の建築も手がけています。たとえばその一つが宮若健康福祉センターです(西岡研究室)。特筆すべき点は、土盛り緑化壁という現代の竪穴式住居ともいべき革新的な新工法を取り入れていること。冬は暖かく夏は涼しいという機能性だけでなく、日本建築特有の水平性の美も追求しており、環境建築のあるべき一つの姿として、意匠の面からも地域からの高い評価を得ています。

Other Important Research and Activities / その他の研究・取り組み

- Preliminary design of both traditional wooded parks and water parks in the Irahara area of Miyako Town / みやこ町伊良原地区の森林公園ならびに観水公園の基本設計
- Design of the Kanda Town Shirakawa Elementary School / 刈田町白川小学校の基本設計ならびに実施設計・監理
- Design of Ecoton, the mascot representing Fukuoka Prefecture's efforts to overcome global warming / 福岡県地球温暖化対策マスコットキャラクター「エコトン」デザイン
- Extraction of the urban planning issues facing the cities of Fukuoka and Kitakyushu / 福岡市・北九州市の都市計画課題抽出

case **07** THE DEVELOPMENT OF FISH-FRIENDLY RIVERS MADE OF NATURAL STONE
自然石にこだわった、魚がのぼれる河川整備の研究



Students in the Department of Integrated System Engineering are proactively implementing environmental conservation initiatives on the regional level. One of these involves research into a type of river development that utilizes natural stone (Akashi Research Laboratory). The goal of this effort is the creation of rivers with stable and durable riverbeds that allow fish to easily swim upstream. These rivers would not utilize concrete. Employed as a test site, the *Iwatakegawa River Research Institute* is a collaborative research hub that is shared with Buzen City and the Fukuoka Prefecture Keichiku Office for Public Works. The Institute is highly regarded in Japan in its role as a facility implementing research in the areas of river dike strength, riverbed movement and related issues. Real rivers are utilized for this research.

総合システム工学科では地域の自然環境保全に向けた取り組みも積極的に行っています。たとえばコンクリートに頼らずに、河床安定性や耐久性にすぐれ、魚が遡上しやすい川づくりを目指す「自然石利用による河川整備の研究」(赤司研究室)も、その一つです。実験場として使用されている豊前市および福岡県京築県土整備事務所との共同研究拠点「岩岳川河川研究所」は、実際の河川で護岸の強度や河床の動き等を実験する施設としては日本で有数の施設です。

Other Important Activities / その他の取り組み

- Organization of the *Waku Waku Science Class* series, which is targeted to the area's residents, including children / 地域住民・児童を対象にした「わくわく科学教室」開催
- Implementation of an educational outreach program covering robotics for elementary schools in Imagawa, Yukuhashi City / 行橋市今川小学校においてロボットに関する出前授業(全2回)実施
- Dispatching teaching personnel in support of science instruction at primary schools in Fukuoka Prefecture / 福岡県小学校理科支援員等配置事業を通じた教員派遣

case **08** CITIZENS FIRST: CREATING A NEW FORM OF URBAN DEVELOPMENT
住民を第一に考えた、愛に満ちた「まちづくり」への挑戦



Targeting local areas facing issues related to the residential environment and disaster prevention, such as deteriorating wooden structures, cramped building lots and narrow roads, the *Residential Environment Maintenance Project* is being implemented in Kitakyushu. Students in the NIT Department of Architecture (Okada Research Laboratory) are participating in one of these efforts as planners. The area that the department is working with – Nagahamacho – is an old fishing village. With the theme of *creating a community its residents will love and feel proud of*, the department has joined together with residents and local government in an urban development effort that emphasizes community and the handing down of regional customs and traditions, and which avoids sweeping, indiscriminate changes to the community.

老朽化した木造住宅・狭小宅地、狭隘道路など居住環境や防災面で問題を抱える地区を対象に北九州市が推進する「住環境整備事業」の一つに、建築学科(岡田研究室)がプランナーとして参加しています。担当エリアは長浜町という古くからの漁村地区。「地域住民が誇りと愛着をもって住み続ける」をテーマに地域に伝わる伝統や風習、コミュニティを重視し、オールクリアランスではない「まちづくり」を住民、行政と一体となって進めています。

Other Important Activities / その他の取り組み

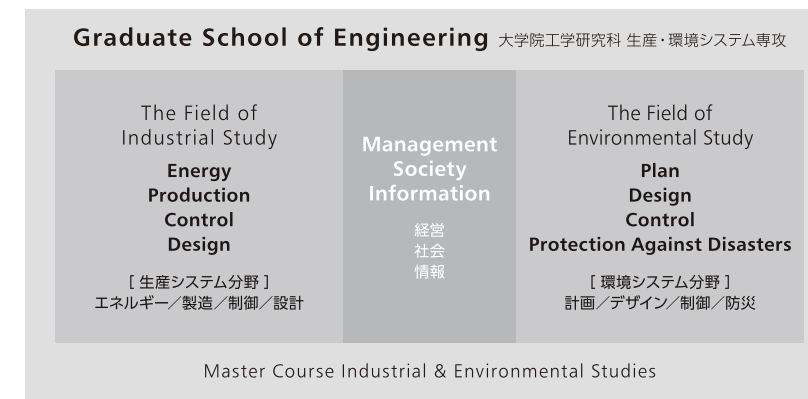
- Implementation of a workshop aimed at developing brand appeal for the Murasakigawa River, which flows through the center of Kitakyushu's Kokura-kita ward. / 北九州市小倉北区を流れる紫川のブランド化を目指したワークショップ
- Coordination and cooperation with the Central Chamber of Commerce of Kokura with the goal of revitalizing the central part of the Kokura district / 小倉中央商業連合会と小倉中心市街地の活性化等を目的とした連携協力
- Environmental improvements in the form of pictorial murals on subway walls in Saenba, Kokura-kita ward / 小倉北区菜園場地下歩道のグラフィック壁画制作による環境改善
- Participation of a student group in support of urban development – 3R – in a project designed to bring improvements to the Muromachi shopping district / まちづくり支援学生グループ「3R」の室町商店街街づくりプロジェクト参加



Industrial and Environmental Studies

西日本工業大学大学院 工学研究科 生産・環境システム専攻(生産システム分野/環境システム分野)

Post-graduate courses in the Graduate School of Engineering consist of Industrial and Environmental Studies which incorporate subject matter from both the Faculty of Engineering and the Faculty of Design. In the Industrial Study area, education and research related to the various technologies of such areas as energy, controls, design and production are carried out, while in the Environmental Study area education and research covers the control, planning and design of natural and human environments, as well as disaster prevention. Both provide students with a curriculum designed to groom engineering and design professionals, equipping them with both an administrative as well as a social framework of reference. Lecturers with a wealth of real-world experience are also invited to address the graduate school.



工学部やデザイン学部の内容を横断統合した「生産・環境システム専攻」(生産システム分野/環境システム分野)で構成。生産システム分野ではエネルギー、制御、設計、製造などに関わる諸技術の、また環境システム分野では自然・人間環境の制御、計画、デザイン、防災などに関わる諸技術の教育、研究を行っています。経営的感覚や社会的感覚を備えた技術者を育成するカリキュラムを提供しています。また、社会での経験が豊富な外来講師を招き、特別講義も行います。

Developing an Elite Corps of Young Professionals

The NIT Graduate School fosters a broad range of social viewpoints. The graduate school is dedicated to grooming high-level specialists, managers and entrepreneurs in the engineering and design-related disciplines – professionals who are self-motivated and dedicated to independently seeking out and resolving issues – through the cultivation of flexible, practical technical abilities.

大学院の「養成する人材、および教育研究上の目的」

西日本工業大学大学院は、幅広い社会的見識と、工学系分野における柔軟な技術応用能力を育成し、課題の発見と対応・解決能力を備えた高度専門技術者、経営者、起業家を養成することを目標としています。

| INTERNATIONAL EDUCATIONAL EXCHANGE AGREEMENTS | 学術交流協定校一覧



- Oct.,10.2006 Yonam Institute of Digital Technology/連庵工業大学校/Korea
- Jul., 4. 2007 Nanjing Institute of Railway Technology/南京鉄道技術学院/China
- Jan.,31.2008 Gumil College/亀尾1大学/Korea
- Nov.,12.2008 L.N.Gumilyov Eurasian National University/グミリョフ大学/Kazakhstan
- Mar.,10.2009 Hohai University Wentian College/河海大学 文天学院/China
- Apr.,24.2009 Tongmyong University/東明大学校/Korea
- Apr.,27.2009 Liaoning University of Technology/遼寧工業大学/China
- Oct.,12.2009 International University of Korea/韓国国際大学校/Korea
- Jun., 3.2010 Silla University/新羅大学校/Korea



ORGANIZATION | 西日本工業大学の構成

Graduate School of Engineering Master's Course (Industrial and Environmental Studies) 大学院工学研究科 (生産・環境システム専攻)		
Faculty of Engineering 工学部	Department of Integrated System Engineering 総合システム工学科	MECHANICAL ENGINEERING COURSE 機械工学系 Students study the fundamental mechanical engineering critical to the production of high-tech manufactured goods. ハイテク製品を生み出す基礎機械工学を研究
		ELECTRICAL , ELECTRONIC ENGINEERING COURSE 電気電子工学系 Students study electrical and electronic engineering, a field that will greatly influence the global environment in the 21st century. 21世紀の地球環境を左右する電気電子工学を研究
		COMPUTER SYSTEM COURSE 情報システム系 Students study the information technology - including information about hardware- that supports continuously evolving systems. 進化し続けるシステムに対応できる、ハードウェアの知識を有した情報技術を研究
		ENVIRONMENTAL AND CIVIL ENGINEERING COURSE 環境建設系 Students study environmentally conscious civil engineering. 環境に配慮した土木技術を研究
Faculty of Engineering 工学部	Department of Digital Engineering デジタルエンジニアリング学科	DIGITAL DESIGN COURSE デジタルデザインコース The training of work-ready engineering and design professionals who have mastered machine products design, analysis and production technology that utilizes three-dimensional CAD, CAE and CAM. 3次元CAD/CAE/CAMを活用する機械製品の設計・解析・生産技術を修得した即戦力技術者を育成
		AUTOMOBILE AND ROBOT COURSE 自動車・ロボットコース The training of work-ready engineering and design professionals who have mastered the mechatronics technology seen in automobile-related technology - including next-generation automotive technology - as well as robotics. 次世代を含む自動車関連技術及びロボットに代表されるメカトロニクス技術を修得した即戦力技術者を育成
Faculty of Design デザイン学部	Department of Architecture 建築学科	ARCHITECTURAL DESIGN COURSE 建築デザインコース Students pursue construction design forms where aesthetics and technology coexist. 美的感覚と技術的要求を両立させる建築デザインを追求
		HOUSING AND INTERIOR DESIGN COURSE 住居・インテリアデザインコース Students study the design of living spaces that create improvements in everyday life. 日常の生活体験を向上させる空間デザインを研究
		BUILDING ENVIRONMENTAL ENGINEERING COURSE 環境設備デザインコース Students study futuristic forms of environmental and energy-conscious building technology. 環境・省エネに配慮した未来型の建築技術を研究
		STRUCTURAL ENGINEERING COURSE 建築構造デザインコース Students study the structural and construction technology that plays a critical role in structural safety. 建築の安全を担う構造技術と施工技術を研究
	Department of Design & Media 情報デザイン学科	ENVIRONMENTAL DESIGN COURSE 環境デザインコース Students pursue environmentally conscious, sustainable design. 環境に配慮したサステナブルデザインを追求
		PRODUCT DESIGN COURSE プロダクトデザインコース Students study how design brings improvements to social worth and quality of life. 「こと、もの、しくみ」のデザインによる社会的価値と生活の向上を研究
		MEDIA DESIGN COURSE メディアデザインコース Students study design forms that meet social needs. 社会のニーズを具現化できるデザインを研究
		CAREER DESIGN COURSE キャリアデザインコース Students seek out the essential human qualities prized in the corporate world. 企業が重視する“社会人基礎力”を徹底追求
Research Center 研究センター	Regional Cooperation Center 地域連携センター	University Library 附属図書館
	Ground Engineering Laboratory 地盤工学研究所	
	Iwatakegawa River Research Institute 岩岳川河川研究所	

BRIEF HISTORY | 沿革

1936	The Kyushu Technical School is established
1967	Nishinippon Institute of Technology is established (Includes the four-year Faculty of Engineering with the Department of Mechanical Engineering and the Department of Electrical Engineering)
1968	The Faculty of Engineering is expanded to include the Department of Civil Engineering and the Department of Architecture
1969	The Faculty of Engineering is expanded to include a teacher-training curriculum
1978	The incorporated educational institution of NIT is split off from the Kyushu School of Industry, also an incorporated educational institution and given its present name
2003	Department names are changed (The Department of Mechanical Engineering is changed to the Department of Machine Systems Engineering, the Department of Electrical Engineering is changed to the Department of Electrical, Electronic and Computer Engineering, and the Department of Civil Engineering is changed to the Department of Environmental and Civil Engineering)
2004	A master's course of study is established (Industrial and Environmental Studies); establishment of the Department of Design & Media; reorganization of enrollment numbers for the different departments; establishment of a satellite campus in Kokura
2006	Establishment of the Kokura campus; establishment of the Faculty of Design (with the Department of Architecture and the Department of Design & Media); changes made to the number of students to be accepted; expansion of the Machine Systems Engineering Department to include courses of study in Digital Engineering; change in location of incorporation
2007	The name of the Environmental and Urban Design Engineering Department is changed to the Department of Environmental Construction
2009	The Faculty of Engineering is reorganized (establishment of the Department of Integrated System Engineering and the Department of Digital Engineering); addition of the newly-created Career Design course of study to the Department of Design & Media of the Faculty of Design; establishment of the Graduate School/Regional Cooperation Center and the Kokura Student Assembly Hall on the Kokura campus
昭和11年 (1936)	九州工学校設立
昭和42年 (1967)	西日本工業大学開学 (工学部4年制: 機械工学科、電気工学科)
昭和43年 (1968)	土木工学科、建築学科増設
昭和44年 (1969)	教職課程設置
昭和53年 (1978)	学校法人九州工業学園と学園分離 学校法人西日本工業学園と改称
平成15年 (2003)	学科名称の変更 (機械工学科を機械システム工学科、電気工学科を電気電子情報工学科、土木工学科を環境都市デザイン工学科)
平成16年 (2004)	大学院工学研究科修士課程 (生産・環境システム専攻) を設置、情報デザイン学科を設置、学科定員の改組、小倉にサテライトキャンパス開設
平成18年 (2006)	小倉キャンパス開設、デザイン学部設置 (建築学科、情報デザイン学科)、入学定員の変更、機械システム工学科コースの増設 (デジタルエンジニアリングコース)、法人所在地変更
平成19年 (2007)	学科名称の変更 (環境都市デザイン工学科を環境建設学科)
平成21年 (2009)	工学部を改組 (総合システム工学科、デジタルエンジニアリング工学科を設置)、デザイン学部の情報デザイン学科にキャリアデザインコース新設、小倉キャンパスに大学院・地域連携センターと小倉学生会館を開設

President's Message



President of Nishinippon Institute of Technology
Shigeaki Kikuchi, Dr.Eng
西日本工業大学 学長
菊池 重昭 (工博)

Developing Industrial & Design Professionals to Support an Information-Based Society

Under the motto of "Investing in Humanity, Pioneering New Technologies", ever since its founding in 1967 Nishinippon Institute of Technology has been developing the skilled industrial engineering and design professionals who will lead future industries through its educational and research efforts. With the globalization and spread of information that has taken place due to advances in science and technology in recent years, engineering and design professionals must not only be well-versed in the basics of science and have a good command of advanced and IT technologies; they must also possess an extensive knowledge regarding environmental and energy-related issues, and also be knowledgeable concerning the creation of a sustainable society and related subjects. NIT is determined in its efforts to develop creative industrial engineering and design professionals possessing the practical skills necessary to address the needs of society. With its rich learning environment, students participate in educational activities arranged in conjunction with systematically organized training programs that cover everything from the basics to the application of cutting-edge technology. With its usual vitality and energy, NIT - a continually-evolving university that has opened its doors to the region as well as society as a whole - will continue to undertake educational and research initiatives that unite faculty and students.

知識基盤社会を支える工業技術者の育成

西日本工業大学は1967年の大学開設以来、“人を育て技術を拓く”をモットーに、今日の産業界をリードする有能な工業技術者の育成を目的として教育研究を実践しています。科学技術の革新によってグローバル化、情報化した現代社会において、技術者には基礎科学力を身につけ、ハイテク技術・IT技術を駆使できる能力を備え、同時に、環境・エネルギー問題など持続可能な社会づくりに関する幅広い知識を持つことが求められています。西日本工業大学は、このような社会のニーズに対応できる創造性豊かな、そして実務的能力を備えた工業技術者教育を、基礎から最先端技術の応用まで体系的に編成された教育プログラムに従い、充実した教育環境の下で行っています。「活力と活気」を旗印に、本学はこれからも、教職員と学生が一体となった教育研究の展開を図り、地域や社会に開かれた大学として持続的な発展を続けることを目指しています。