

SHAPING FUTURE SPECIALISTS

LUCAS-NÜLLE GROUP

PHYWE

LN

INTEA



“Innovative training systems for educating specialists better and faster.”



Dipl.-Ing. Rolf Lucas-Nülle
Founder of the Lucas-Nülle Group





Fit for the future – thanks to modern practice-oriented education

Investments in technical training and science are the prerequisite for economic growth and wealth creation. The future can only be moulded by the trained hands and minds of qualified scientists, engineers, technicians and skilled workers.

With innovative experimenting and training systems we ensure the preconditions for an excellent education that focuses on high-quality qualifications and hands-on skills. That's how theory can be transferred into everyday on-the-job applications.

Your advantages:

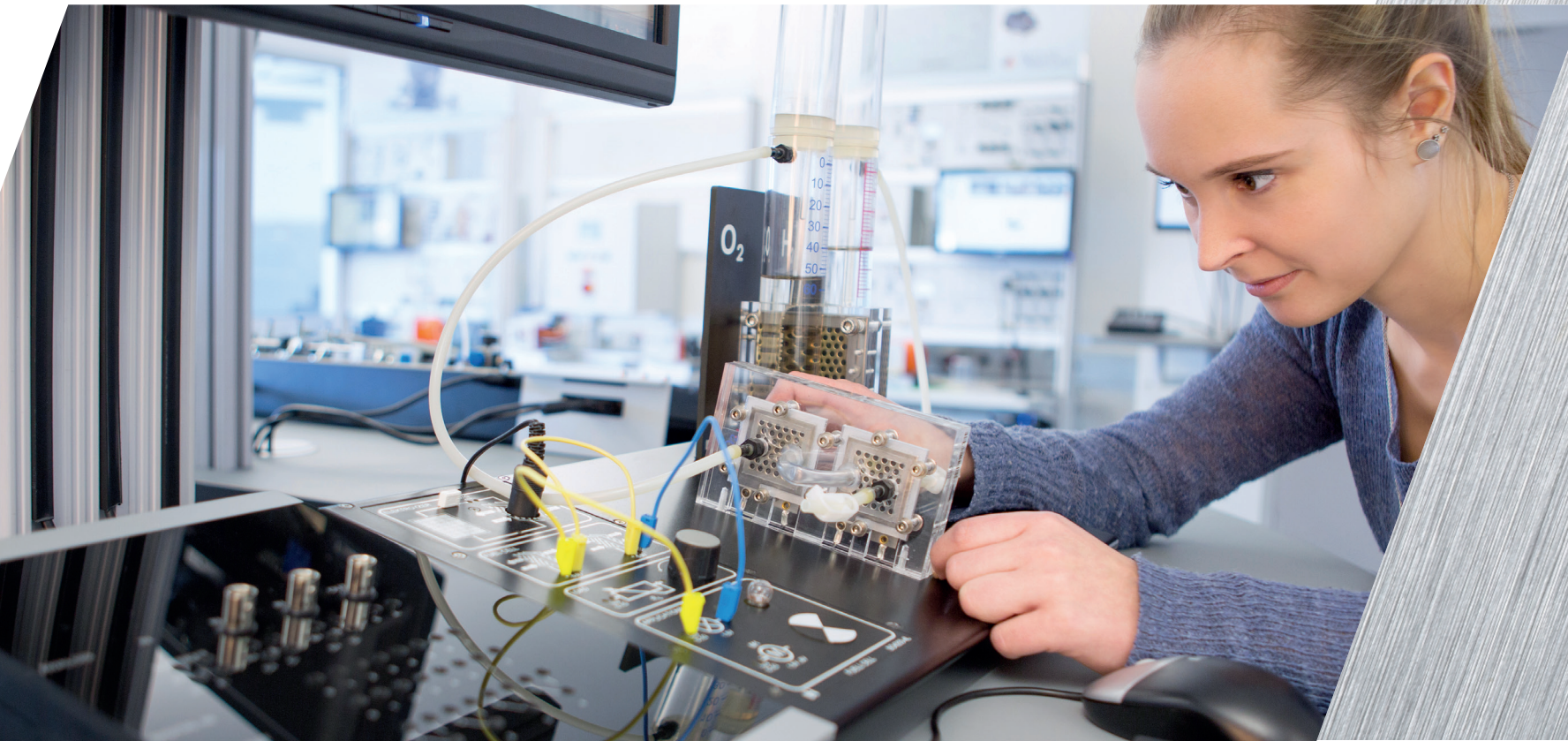
- Technology-oriented education
- Highly skilled specialists for industry, science and research
- Brief effective training

LEARNING, EXPERIMENTING, UNDERSTANDING

The guarantee for success is combining theory with practice

The synchronizing of theory and practical application makes learning with our systems fast and more efficient than with any other competing products.

- Safe and self-explanatory experiment set-ups
- Positive learning experience
- Excellent training and support for the instructors



Attaining practical skills and expertise

01 The theoretical background of the subject is conveyed using e-learning courses packed full of animations and graphics to provide an exciting and contemporary approach to learning.

04 By carrying out hands-on practical work, the students obtain expertise and also internalize theory and practice.

02 PC-assisted experiments provide initial practice using experiment equipment that is safe and reliable.

03 Experimenting with systems equipped with industrial components prepares the students/trainees for their future working environment.



Tailor-made concepts for your educational project

In the internationally operating Lucas-Nülle Group comprising three individually specialized companies, we bundle our know-how and experience to provide even better and more customized solutions. Our strengths are our ability to deliver ready-made curricula and efficient, didactically designed solutions, while also providing intelligent support during their technical implementation. We do all this while working very closely with responsible parties from politics and industry.

- Natural science education at schools, colleges and universities
- Technical education at universities, colleges and industrial training centres
- **World-wide more than 145,000 satisfied clients**
- **More than 35 languages in over 95 countries**
- **Certified sales partners in more than 70 countries**



PHYWE
excellence in science





Satisfied Customers

Southern California Edison, USA FAW- VW, China Lawrence Hall at UC Berkeley, USA

Bauman University Moscow, Russia IPRC South, Rwanda Buffalo State University, USA

Université d'Alger USTHB, Algeria ONDA Airport, Morocco Toyota St. Petersburg, Russia

University Lahore, Pakistan Siemens Training Academy, Germany

University of Cambridge, England North Alberta Institute of Technology, Canada GMI Malaysia

Porsche AG, Germany CFDT Senegal Japon Dakar, Senegal

King Saud University Riyadh, Saudi Arabia Osun College of Technology, Nigeria

Ashgabat Military Academy, Turkmenistan BASF Ludwigshafen, Germany Future University, Cairo, Egypt

CERN – Nuclear Research, Switzerland Lycée Bel-Val, Junglinster, Luxembourg

UKZN Durban, Smart-Grid Research Centre, South Africa Shanghai Second Polytechnic University, China

Audi UTP Puebla, Mexico King Mongkut Institute of Technology, Thailand

CTA Bruxelles, Belgium Universidad de los Andes, Colombia Instituto Tecnológico de Monterrey, Mexico

UET Peshawar, Pakistan Royal Guard College, Oman

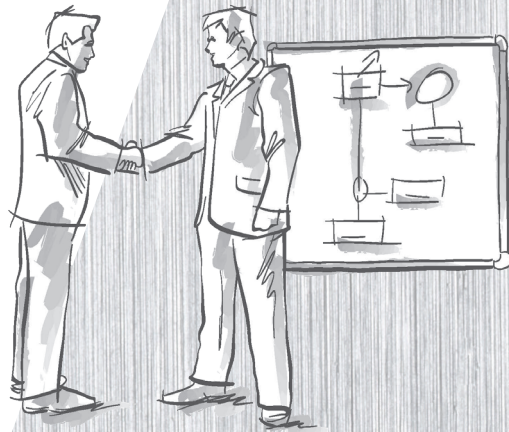
Ministerio de Educaciòn, Costa Rica ISPTec Luanda, Angola Polytech International Tunis, Tunisia

Petroleum Institute Kigumba, Uganda Audi AG, Germany

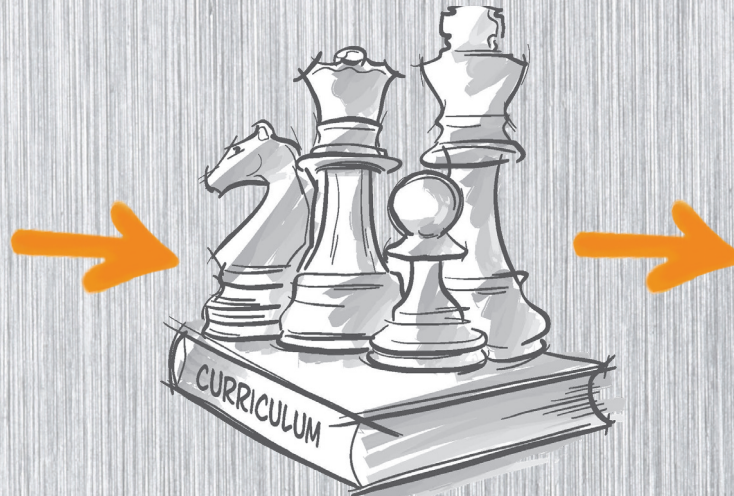
College No II, HCMC, Vietnam Universidade Eduardo, Mozambique

“Since 2007 we have been cooperating with Lucas-Nülle, Germany, in bilateral and academic projects. Through mutual collaboration, we have successfully established training centres and e-learning programmes. Our university acknowledges the high standard of the training equipment provided.”

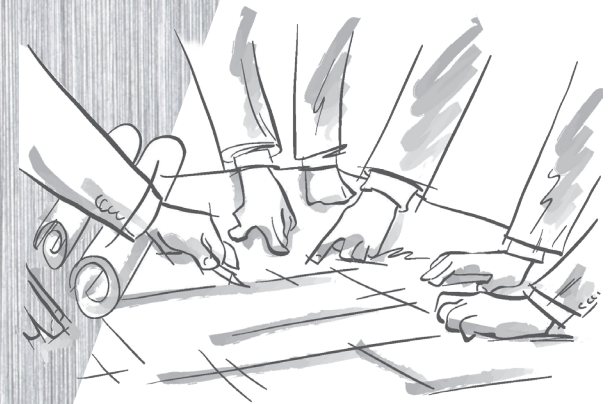
Prof. Dr. Teravuti Boonyasopon, KMUTNB President



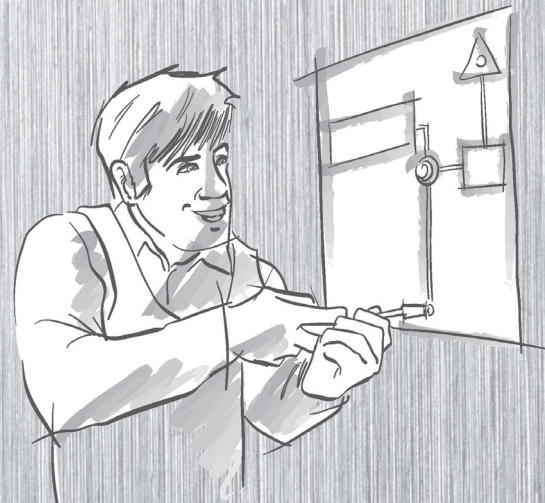
PROJECT CONSULTING



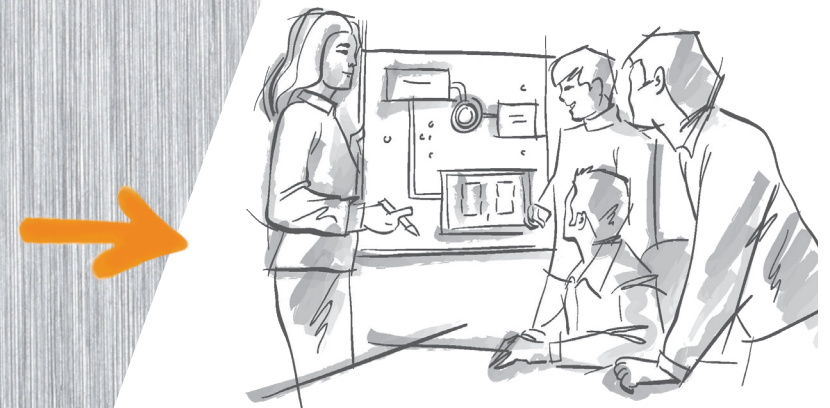
CURRICULUM STRATEGY



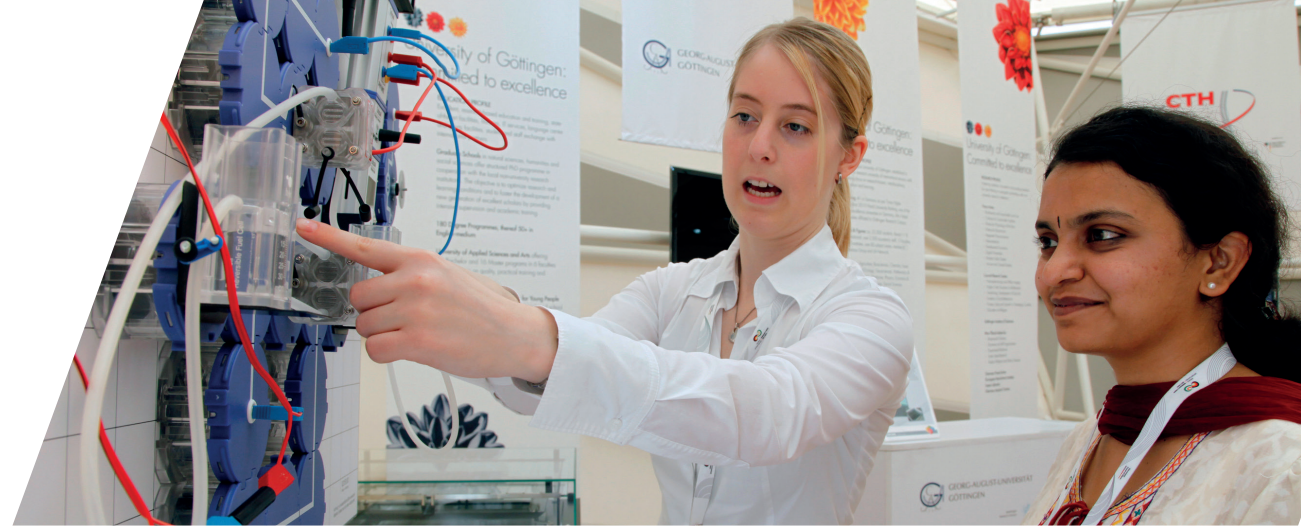
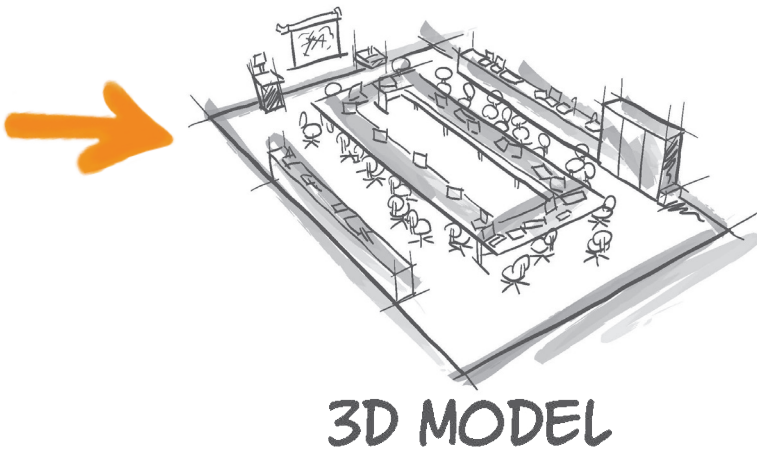
FACILITY PLANNING



INSTALLATION / IMPLEMENTING

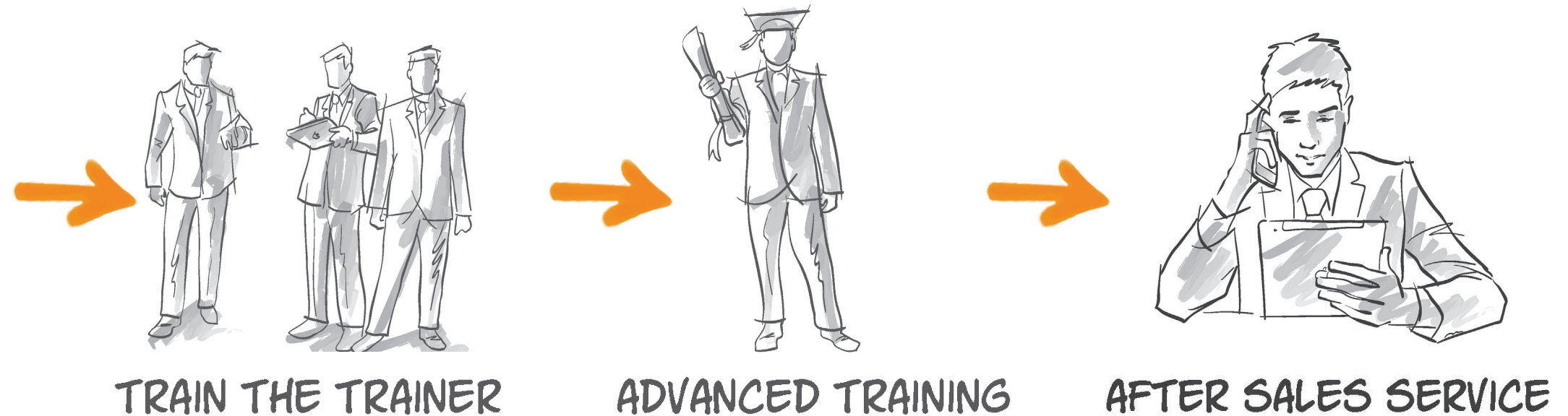


TECHNICAL INSTRUCTION



9 steps to success

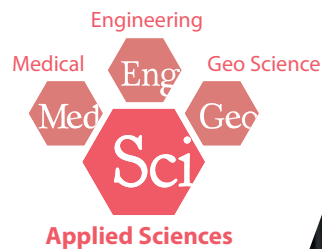
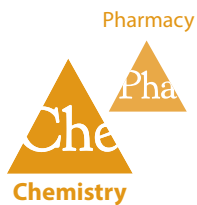
As your reliable partner with international experience we assist you in the planning and implementation of your project. We focus our know-how and experience on finding a one-stop total solution covering all relevant areas: individual consultation and planning, efficient training and personal one-on-one support on location. And even after the project has been completed, we are the experts you call on for help, if and when you need it.

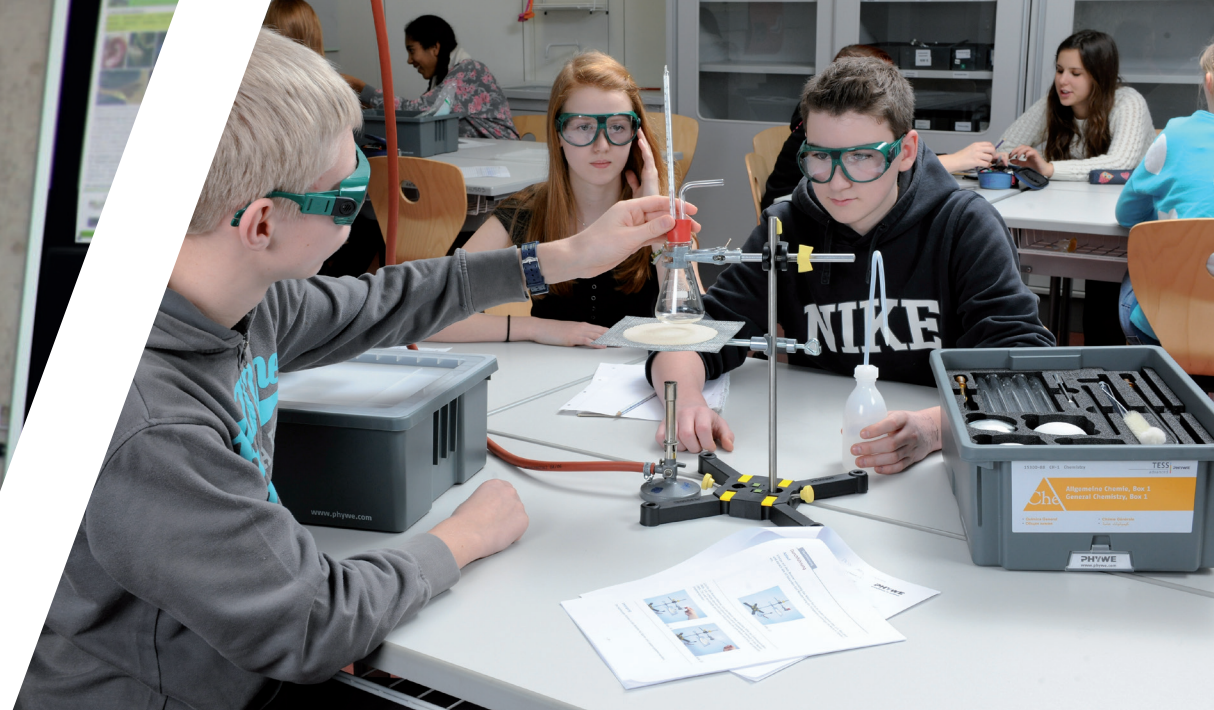


The best address for science training and education –
PHYWE is the solid and reliable partner at your side!

For more than 100 years PHYWE in Göttingen has been developing and producing equipment, experiments and solutions in the natural sciences for cutting-edge teaching and research in schools, universities and institutes all over the world. Whether it is traditional instruction with standard experiments for students and demonstration, wireless instrumentation or new learning scenarios such as Instruction 3.0, PHYWE stands for quality, reliability and expertise of the highest calibre.

- 3,000 experiments from every area, and each conforming to standard syllabuses





PHYWE solution systems for natural sciences

- Everything you need from the biggest product range on the natural science market
- Conforming to your syllabus in all natural science subjects based on the International Cambridge Curriculum
- Making future-oriented and sustainable investments in a modern, internationally top-class education system
- PHYWE is taking the lead on new learning scenarios such as Instruction 4.0
- Total, precision solutions with cleverly designed student and demonstration experiments, modern measurement technology, experimentation literature and a comprehensive pre-sales and after-sales service



Excellence in Technology &
Training Solutions

Training systems for skilled workers,
technicians and engineers



Building Management Systems



Power Engineering / Smart Grid /
Micro Grid



Renewable Energies



Transformers / Power Electronics /
Machines



EloTrain - Plug-in System



Communication Technology



Process Control



Process and Chemical Engineering



Machinery and Systems Engineering
Pneumatics / Hydraulics



Machinery and Systems Engineering



Microcomputers



Automation Technology



Automotive Technology



HVAC and Refrigeration

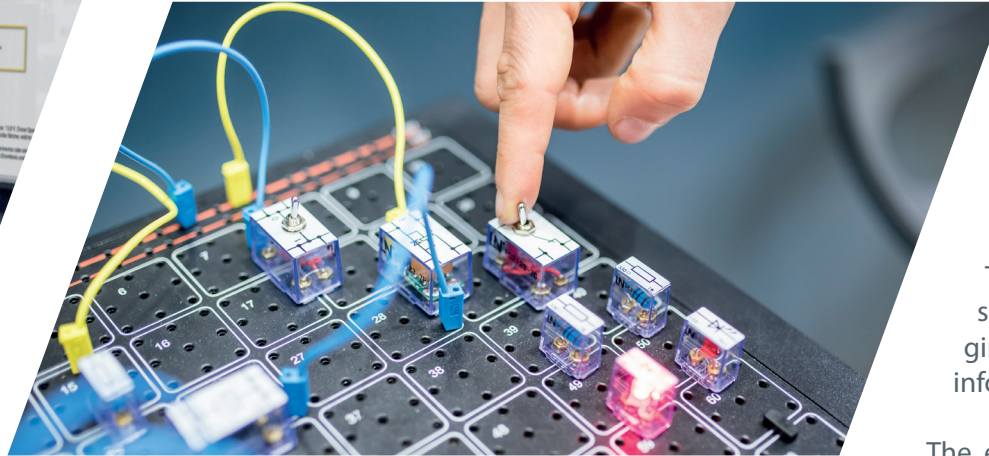


Lab Systems



VOCANTO®



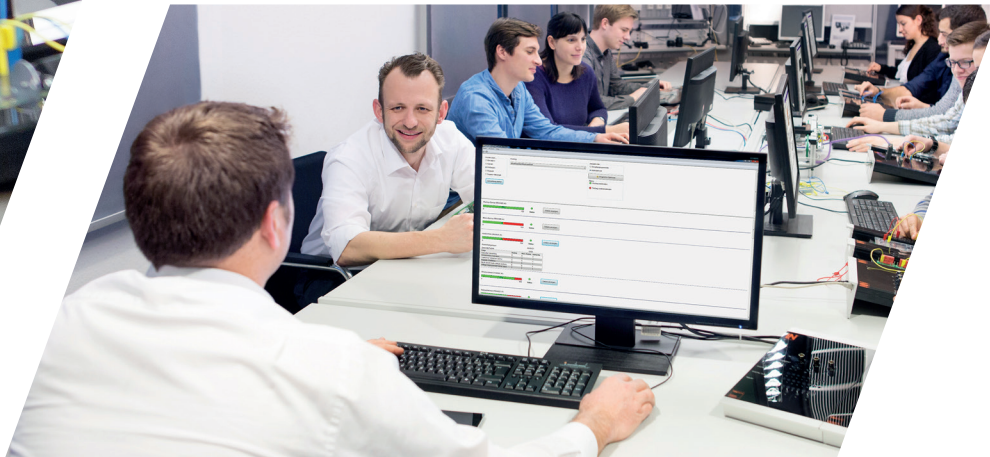


Technical training systems on the highest level

The Lucas-Nülle company provides premium training systems and laboratories for technical training and engineering studies which combine theoretical background information and practical applications in an innovative way.

The experimentation systems totally simulate real working situations that students will confront later in their working lives. That is how the students develop the necessary hands-on skills needed for future success on the job.

- Computer-assisted training and experimentation systems
- E-learning courses including animations
- Training systems with industrial components
- Administration, customization, testing and evaluation with the Classroom Manager



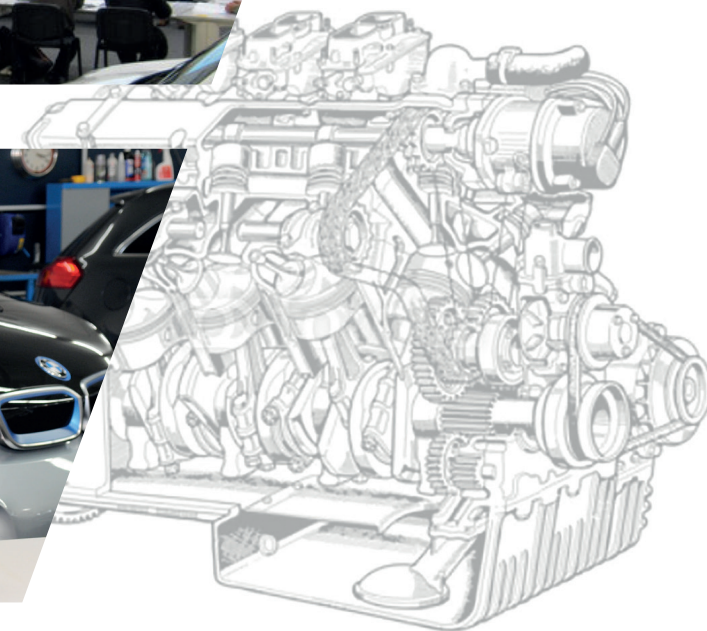


Specialists for training and business development

INTEA provides customer-specific training and further education for industry and trade organizations.

- Training and Business Development
- We offer a wide spectrum of options for carrying out effective and equally cost-efficient training to improve your business.
- Face-to-face training for technical content as well as process-controlled procedures in service and sales
- Virtual Classroom Training ideally combines the benefits of face-to-face training and modern mobile web technology
- INTEA can plan, finance, construct and operate your new training centre, anywhere in the world
- Facilitates product launches and special events, combining training activities, invitation management and logistical organization





Effective INTEA Training

INTEA has extensive project experience in the successful development and implementation of qualification programmes according to international standards.

We reduce costs by exploiting synergies and increase "the joy of learning" through the use of modern learning methods and teaching materials of the Lucas-Nülle Group.



PHYWE

Education in the natural sciences

- 01 Experiments & solutions conforming to standard curricula
- 02 Modern data logging systems
- 03 Innovative learning concepts with Instruction 3.0
- 04 Comprehensive pre- and after-sales service

LN[®]

Laboratories for all vocational and engineering subjects

- 01 Utilization of industrial components
- 02 Combination of theory & practical applications
- 03 Training on industrial systems
- 04 E-learning courses available in your native language



LEARNING, EXPERIMENTING, UNDERSTANDING

Our integrated solution

From full installation of a laboratory to the delivery of hardware and software, all the way to on-site assembly and seminars, we provide everything you need from a single source – pre-wired and turn-key!



Training und Consulting

- 01 Seminars in your native language
- 02 Custom fine-tuning to your curricula
- 03 Training face-to-face on site
- 04 All complete with industrial components

GUARANTEED QUALITY

 made
 in
 Germany

The products and training systems are engineered and manufactured in Germany. We take pains to supply the highest quality and in every detail: from the life-span of our products to the sustainability of the overall solutions, while upholding the environmental awareness of everyone involved.

Not least thanks to our know-how, flexibility and quality management according to DIN ISO 9001.





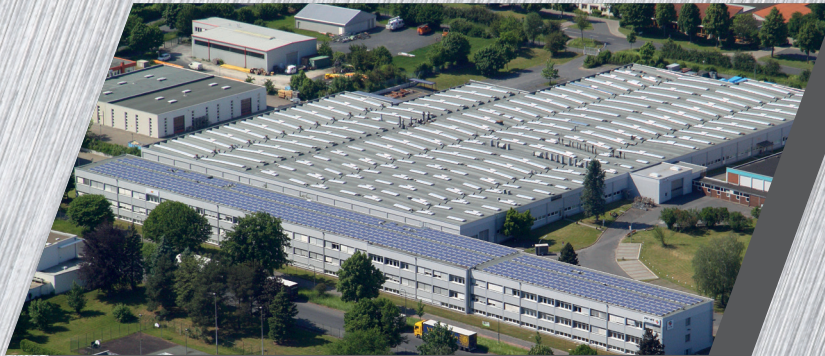
Innovation made in Germany

The progress and change inherent in the sciences, in engineering and advancing technologies, these are the driving forces that set the standards for product management and for the development of our Corporate Group. We are confident in the know-how we have collected in our over 100 years of experience while constantly improving ourselves and our products. Our continuous testing process in place guarantees the properties of the materials we use and the quality of the manufactured components.

That is how we ensure that the latest trends in technology and science are also reflected in our product development.

The result: long-lasting products that constitute a sustainable investment!





PHYWE Systeme GmbH & Co. KG

Robert-Bosch-Breite 10
37079 Göttingen | Germany
Tel. +49 551 604-0
info@phywe.com
www.phywe.com



Lucas-Nülle GmbH

Siemensstr. 2
50170 Kerpen | Germany
Tel. +49 2273 567-0
info@lucas-nuelle.com
www.lucas-nuelle.com



INTEA GmbH

Dieselstr. 1
50170 Kerpen | Germany
Tel. +49 2273 95 90-0
info@de.intea.com
www.intea.com