

**German MINT / STEM** Tour:

Berlin, Leipzig, Frankfurt & Munich Destination: Itinerary: 8-days / 7-nights in destination

GERMAN MINT				
Day		Morning	Afternoon	Evening
1	Sat	Overnight travel to Berlin, Germany		
2	Sun	Arrive Berlin, Germany; hotel check-in, Welcome, Safety & Orientation	Science Center Spectrum	Dinner & 3D Mini-golf Evening
3	Mon	dEIn Laboratory Master Class at Technology University of Berlin	Experience Berlin Indoor VR Ride	Dinner & Guided Night Watchman Tour
4	Tues	Motorcoach to Frankfurt (6.5 hours), + stop in Leipzig (2-hours)		Dinner & Frankfurt Evening Walking Tour
5	Wed	DLR School Lab + 4 Lab Experiment Sessions - German Aerospace Center	Dialog Museum Darkness Tour	Dinner & Free Time
6	Thur	Motorcoach to Munich (5-hours)	BMW Plant Tour	Dinner & Free Time
7	Fri	Robotics Master Class & Guided Tour at Deutsches Museum	Munich 'Old Town' Guided City Walking Tour	Dinner & Bowling
8	Sat	Full-day excursion to Bavaria's Neuschwanstein Castle		Traditional German Farewell Dinner
9	Sun	Hotel check-out, transfer to airport, check-in and return flight home		







As with all sample itineraries, please be aware that this is an "example" of a schedule and that the activities and hotels shown may be variable dependent upon dates, weather, special requests and other factors. Itineraries will be confirmed prior to travel.













## Day 1

#### Dinner in flight

Travel on an overnight flight to Berlin, Germany.

## Day 2

Breakfast in flight, lunch on own, dinner included

Travel to the capital city of Berlin, Germany. Transfer to your hotel, check-in and get settled. Later, we'll have our Welcome, Safety & Orientation Meeting and get some exploring in!

Germany is synonymous with a lot of things — beer, food, sausages, hiking, castles

and techno parties, yet there's way more to modern Germany than that. There's a vibrant international, art, and music scene in Berlin, beautiful forests in the west, great cathedrals, picturesque 'sound of music' cities in the south and overlooked historic cities and beaches in the north. While Germans may be thought of as serious and focused people, they are also some of the nicest, most helpful people I've come across. The more I visit Germany, the more I fall in love with it. It's an ancient region with more to do than one can imagine. Don't rush the country. Take your time. There's a lot to see – and it's all worth seeing. - Nomadic Matt



# SAMPLE HOTELS

Berlin / 2-nights: Meininger Berlin or similar
Frankfurt / 2-nights: DJH Hostel or similar

Munich / 3-nights: München Olympiapark or similar

Welcome to Germany! Herzlich Willkommen in Deutschland!









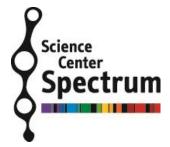


Belin - the German capital, is renowned for its exceptional variety of attractions, its flourishing cultural scene and a way of life that's both fast-paced and relaxed. Nowadays, people look to Berlin for the latest trends in lifestyle, music and art and a lot of start-up companies. Inspired by this outpouring of creativity, growing numbers of artists are arriving in the city from around the world, making it one of Europe's most exciting destinations.

Upon arrival at the airport, you'll clear customs and immigrations, meet your coach driver and get transferred to your accommodation in Berlin by private coach. In the afternoon, we'll kick off our German STEM tour with a visit to the Science Center Spectrum.

Science Center Spectrum - Some 150 interactive exhibits make science and technology a special experience at Science Center Spectrum. Attractive and astonishing phenomena encourage young and old alike to join in the experiments independently. Fundamental laws of nature, the basics of science and technical principles are explained in a fun way. A visit to Science Center Spectrum is a fascinating and eventful journey into the world of science and technology, which fires your imagination and makes you think. Approximately 3-hours.







In the evening, we'll have a delicious dinner at our hotel and then get ready for a challenge with 3D black light Mini-golf!

## Day 3 - Creative Technology Focus Breakfast, packed lunch and dinner included

After breakfast at our hotel, we'll have an early start today for your first STEM workshop at the dEIn Laboratory.











The Electrical and Computer Science Lab at the Technology University of Berlin — The dEIn laboratory at the Technology University of Berlin offers interdisciplinary projects and services that give insight into the diversity of courses and job profiles related to electrical engineering and computer science. dEIn Labor is a place for creativity and experimentation where pupils, teachers, parents and partners of the Faculty IV and the TU Berlin are welcome to jointly develop new ideas and to enrich the STEM education through exciting research input. Experiments can be workshops such as how to program an app for an android system, or even a classic robotics workshop. The lab duration will be approximately 4 — 6 hours; dependent upon the type of workshop. Please plan on submitting specific workshop collaboration requests a minimum of 4-months in advance of travel.

Current workshop options include the following, based on availability:

## Creating Apps for Android; duration 4 – 6 hours

The Android operating system plays a major role in software development as it is used by many smartphones and tablets. In this workshop, you will learn how to easily develop first programs (apps) for Android. This is done using the App Inventor, which lets you program apps through a graphical interface without having to learn a programming language first. We create a small game that can be run on any Android device. You do not need your own smartphones for this because tablets and PCs are available for testing. The project is also suitable for participants with previous knowledge.

## *Hacking as a Job*; duration 4 – 6 hours

What can a person's profile tell us about their password? Where does data theft happen, which apps can access what, what is a secure password? These are just some of the questions that security specialists deal with in their jobs. In this workshop, you will learn what skills and training they need and in which industries they work. But that's not all! You will be active as "hackers" yourself, crack passwords with the help of the Python programming language and know at the end what makes a really good password (spoiler: it's not the special characters!).

Following the workshop, we'll have a bird's eye view of old Berlin! And then after dinner, we'll embark on a walking tour.

**VR Experience: Berlin, 1985** – A bus rolls up to Checkpoint Charlie, the guards block the way to check the passengers. The passengers are travelers to a bygone era - guests of TimeRide Berlin. Modern VR technology makes it possible not only to take a look at history, but to experience it first-hand in this fun activity.

**Berlin Night Watchman Walking Tour** - Walking through the city at night, we'll be accompanied by the lamplighter. Embrace the old-time feel as the lamplighter guides you with the glow of his lantern. Imagine you are in a fairy tale, as actors perform around you in costume. Discover the fascinating history of the area as you venture through the oldest quarter of Berlin.













**Day 4 - Hello Frankfurt!**Breakfast, packed lunch and dinner included

This morning we'll say goodbye to the beautiful capital city of Berlin and continue on to stunning Frankfurt; approximately a 6.5-hour drive. Sit back, enjoy the countryside. If you desire to travel by train, that can be arranged too! After about 3 hours, we'll stop in Leipzig for a 2-hour break to explore the city.

in autumn 1989 started from here. Since the middle ages it has been an important trading center and is a place that is known all over the world to be one of the most important trade-fair centers. There are a lot of important sites in Leipzig, among them: The Former Town Hall (Altes Rathaus) which also houses the local history museum (Museum für Geschichte der Stadt Leipzig), the Thomaskirche, which became famous through Johann Sebastian Bach, who was cantor for 27 years and who is buried here, and, of course, the Former Produce Exchange (Alte Börse), which was built between 1678 and 1687 and is used today for fairs and festivals.

After our stop in Leipzig, we'll continue on to Frankfurt. Upon arrival, we'll check-in and have a bit of a chance for some free time before dinner at our hotel.

Frankfurt, a central German city on the river Main, is a major financial hub that's home to the European Central Bank. It's the birthplace of famed writer Johann Wolfgang von Goethe, whose former home is now the Goethe House Museum. Like much of the city, it was damaged during World War II and later rebuilt. The reconstructed Altstadt (Old Town) is the site of Römerberg, a square that hosts an annual Christmas market.





After dinner, we'll enjoy a **Guided Walking Tour** of Frankfurt to explore the city!

**Day 5 – Aerospace Focus**Breakfast, packed lunch and dinner included











After breakfast at our hotel, today we'll head to the DLR School Lab.

**DLR / The German Aerospace Center** – is one of Europe's largest and most modern research institutions. Here is where the aircraft of the future are being developed and pilots trained, rocket engines tested, and images of distant planets analyzed. In addition, 8,000 DLR staff members are investigating next-generation high-speed trains, environmentally responsible methods of generating energy, and much more.

At the *DLR School Lab*, students are introduced to age-suitable topics which are under active investigation at DLR such as planetary research, optical information systems, and transportation research. Under the expert guidance of experienced tutors, students can become researchers by conducting their own fascinating experiments related to current research topics. These include experiments under microgravity conditions, or using infrared radiation, or creating images with a three-dimensional effect – using the same principles behind the stereo camera developed in Berlin and which has been, for years, transmitting brilliant 3D images of the surface of Mars. Other experiments reveal how navigation systems function, show how traffic light phases on busy intersections can be safely manipulated, or examine alternative energy sources. The school lab project includes approximately 4-hours of lab work, dependent upon projects selected.





The "Best of DLR" day of experiments is almost as varied as DLR itself. The DLR offers students a diversified mix of exciting experiments tailored to the age level of the visiting group and selected from the DLR research fields of aeronautics, space, energy and transport. Depending on the size of the group and the length of time spent, the module consists of up to three different experiments.

# Possible experiments:

Fuel Cell - Hydrogen as a future energy supply
Floating Car Data - The fastest way to the destination

Graetzel Cell - The Popeye of solar cells
Phased Traffic Lights - That can't be so hard!?

Infrared - The fascinating world of invisible heat radiation
Laser - From laser show to measuring distances remotely

LSA control - Traffic lights combat traffic chaos

Meteorites - A hazard for Earth?

Youth Mobility - What moves young people?

Navigation - With GPS and Co. through Science City in Adlershof

Photovoltaics - Sunny outlook for environmentally benign energy

Weightlessness - Experimenting with microgravity









Seismology - A trip to the middle of the earth

Solar thermal systems - Getting the sun to shine for us also at night

Stereo images - The third dimension in full view

Engine acoustics - Full speed ahead – with minimal noise!

Traffic simulation - Traffic jams that don't bother anyone

Heat accumulators - A pocket-size sun2go

In the afternoon, we'll explore the darkness!

**Dialog Museum Darkness Guided Tour** - What do blindness and visual impairment mean? How do blind people cope with everyday life? What does the term inclusion mean and how can you contribute to an inclusive society? These are just a few important and exciting questions that your class will address during a visit to the Dialog Museum. Added to this is a unique sensory experience: feeling, hearing, smelling and tasting in absolute darkness. The tour includes a guided tour through the lightless exhibition course, four different themed rooms - including a temporary exhibition room - and a final visit to the DunkelBar. Here you have the opportunity to talk to the guide over a drink in the dark.

We'll have dinner locally and then afterwards, we'll have some free time for activities or just to explore Frankfurt!

## Day 6 - Automobile City Munich!

Breakfast, packed lunch and dinner included

After breakfast, we'll check out of our hotel and get prepared to travel on to Munich today; approximately a 5-hour transfer.

Upon arrival in Munich, we'll head straight to BMW for a visit of the famous BMW plant!

BMW Group - As representative of all the BMW Group's international production facilities, the BMW Group Munich Plant, right next to the BMW Welt, offers a direct insight into state-of-the-art automobile manufacturing. The tour through BMW's original plant offers an exciting insight into all areas of automobile production with experts focusing on specific requests and questions. In its concept and route, the BMW Group plant tour follows specific content-related criteria, giving guests access to all



automobile production technologies at BMW Group Plant Munich: The Press Shop, Body Shop, Paint Shop, Engine Shop, the Production of Interior Equipment and Seats, as well as Assembly. Approximately 2-hours.

Munich - Originally a village founded by Benedictine Monks, is now the heart and capital of Bavaria offering numerous historic buildings, theatres, museums, and art galleries. If you have free time, try to sneak in a visit to Nymphenburg Palace!

We'll have the remainder of the afternoon and evening free to explore beautiful Munich with dinner at our hotel.









Breakfast, packed lunch and dinner included

Are you ready for Robotics? After breakfast at our hotel, we'll have the chance to participate in a specialized robotic workshop and also have a guided tour of this amazing museum!

TUMLab Robotics Master Class - Designed by Technical University Munich and in cooperation with Deutsches Museum, students can literally "come to grips" with technology and research. They can try computer programming, control devices, design things and do research – all focused on their age group and ability levels. It's all about hands-on science, math and technology. Topics covered include robotic programming, assembly line control, CSI and forensic evidence analyzing, and more. The TUM Lab is located at Deutsches Museum. Approximately 5-hours.







In the afternoon, explore Munich!

Munich 'Old Town' City Walking Tour - Your guide will pick you up at the museum for a walking tour of Munich, focusing on the old town areas. Approximately 3-hours. Your walk will bring you back to your hotel for dinner.





After dinner at your hotel, get ready to strike your claim with an evening **bowling challenge**! Get ready for fun!

## Day 8 - Fairytale Castle Neuschwanstein!

Breakfast, packed lunch and dinner included

After breakfast, embark on a wonderful full-day excursion to the amazing, fairytale Neuschwanstein Castle.















Neuschwanstein Castle - Neuschwanstein Castle is a 19th-century Romanesque Revival palace on a rugged hill above the village of Hohenschwangau near Füssen in southwest Bavaria, Germany. The world famous Neuschwanstein castle was constructed in 1869 by Ludwig II in honor of Richard Wagner, the musician Ludwig admired most. The castle was initially meant to be a setting for Richard Wagner's opera "The Ring of the Nibelungen". Ludwig II spent only 170 days in his castle, he died in 1886 - before the constructions of the castle were finished. This was the model for the castle in Disneyland. We'll hike the castle trail, a wide sloping path that opens to the most amazing art and architecture you've ever seen. This is a true once-in-a-lifetime excursion and one not to be missed! Neuschwanstein Castle

After our absolutely incredible day, we'll travel back to Munich for our Farewell Dinner.

The Hofbraeuhaus Farewell Dinner – Get ready to enjoy a traditional German evening! The Hofbraeuhaus is a 3-floor biergarten dating back to the 16th century, with a Bavarian restaurant, shows & upbeat vibe.







Day 9 Breakfast included; lunch on own, dinner in flight

Today it is time to say 'Auf Wiedersehen' (goodbye) to Germany as we pack up and head for home. Don't be sad because as the Germans say, "You always meet twice in life!"











# GERMAN MINT / STEM

**Minimum Booking Numbers:** 20 students

#### What's Included:

Roundtrip flights or motorcoach transfers

7-nights' accommodation in Germany – 2-nights in Berlin, 2-nights in Frankfurt, and 3-nights in Munich Airport transfers & group transportation (coach & public) to activities

Breakfasts, lunches & dinners daily starting with dinner on your night of arrival and ending with breakfast on your day of departure

All inclusions as shown in the above itinerary:

- ✓ Science Center Spectrum
- ✓ DEIn Laboratory Workshop (Hacking As A Job OR Creating Apps for Android)
- ✓ Berlin Guided Night Watchman Tour
- ✓ VR Experience: Berlin 1985
- ✓ Frankfurt evening guided walking tour
- ✓ Dialog Museum Darkness Tour
- ✓ DLR School Lab with 3 Experiment Opportunities
- ✓ Guided BMW Plant Tour
- ✓ Robotics Master Class at Deutsches Museum
- √ Guided tour at Deutsches Museum
- ✓ Munich 3-hour guided walking city tour
- √ Guided tour of Neuschwanstein Castle
- 3D mini-golf with 3D glasses (evening activity)
- ✓ Bowling (evening activity)

Personal Tour Director

24-hour emergency cover

#### What's Not Included:

- ⊗ Fully comprehensive insurance (mandatory)
- ⊗ Beverages, apart from table water, at meals served in restaurants (pay on own for other beverage options)
- ⊗ Transfers to/from home airport
- ⊗ Cost of visas, full or collective passports
- ⊗ Cost of inoculations or medication required for travel
- ⊗ Sightseeing / Entertainment Options not shown in Itinerary
- Hotel incidental deposits & bills meals, mini-bar items, recreation charges, purchases billed to room, etc.
- ⊗ Any gratuities hotel services, specialty guides, coach drivers, tour ambassador
- Additional taxes, fuel surcharges or service charges levied by the governments or our suppliers
- Baggage handling (each student should be able to carry/load their own suitcase)
- Credit card fees if individuals wish to pay via credit card instead of ACH (online check).

As always, our staff are always available to you to answer any questions you may have regarding programming. If we may serve you in any way, please do not hesitate to contact us.







