

# 1404 - Plan of the Year

## Objective

This year we want to become a dominant expert in some areas including [#foundations-of-mathematics](#), [#general-relativity](#) and [#computer-science](#). We would dive into these by road-maps, and move forward by learning more concepts.

Beside these we have tasks and projects that we want to initialize and officially release in the next year.

These include [#rebranding-isk](#), [#mithra](#), [#nukleus-design-language](#), [#isk-manifesto](#), [#kompute](#), [#kosmos](#), [#koncept](#), [#xavier](#), [#music-production](#), [#learning-motion-graphics](#), [#knowledgebase](#), [#dedukt](#), [#knowldge-coin](#).

Yes this is a dense, hard year. But man aren't we tired of talking to people that won't help anyway? Let's do this once to be kept in history, let's make a master plan.

## First Quarter

- **Projects:**
  - *Re-branding ISK*
  - *ISK Manifesto*
  - *Mithra*
  - *Nukleus Design Language Components*
- **Foundations of Mathematics**
  - *Set theory*
  - *First-Order logic and Proof Techniques*
  - *Advance Set Theory, Foundations of Arithmetic*
- **Computer Science**
  - *Algorithms & Kotlin/Java Mastery*
  - *Backend Development & Databases*
  - *System Design, DevOps & Security*
- **Gravitation**
  - *Introduction to General Relativity and the Geometry of Spacetime*
  - *The Einstein Field Equations and Newtonian Limit*
  - *Black Holes and Event Horizons*

## Second Quarter

- **Projects**
  - *Kompute*
  - *Kosmos*

- *Konzept*
- *Xavier*
- *Music Projects*
- **Foundations of Mathematics**
  - *Computability & Recursive Functions*
  - *Gödel's Incompleteness Theorems*
  - *Model Theory & Meta-Mathematics*
- **Computer Science**
  - *C/C++ Mastery & OS Concepts*
  - *Computer Graphics & Reverse Engineering*
  - *Game Development & Parallel Computing*
- **Gravitation**
  - *The Dynamics of Spacetime and the Einstein Tensor*
  - *Gravitational Radiation and the Einstein-Hilbert Action*
  - *Cosmology and the Expanding Universe*

## Third Quarter

- **Projects**
  - *Dedukt*
  - *Learning Motion Graphics*
  - *Whatever missed from the previous quarters*
- **Foundations of Mathematics**
  - *Introduction to Category Theory*
  - *Advanced Category Theory & Topos Theory*
  - *Type Theory & Constructive Mathematics*
- **Computer Science**
  - *Haskell & Compiler Theory*
  - *Machine Learning & GPU Programming*
  - *Reinforcement Learning & Distributed Computing*
- **Gravitation**
  - *Einstein Equations in the Presence of Matter*
  - *Spacetime Singularities*
  - *Rotating Black Holes and the Kerr Metric*

## Fourth Quarter

- **Projects**
  - *Knowledgebase*
  - *Knowledge (Coin)*

- **Foundations of Mathematics**
  - *Advanced Logic & Proof Assistants*
  - *Topos Theory & Structural Mathematics*
  - *Foundations of Physics and Alternative Mathematics*
- **Computer Science**
  - *Kotling Multiplatform & Ethical Hacking*
  - *Blockchain and Advanced System Design*
  - *Final Capstone Project & Compiler Construction*
- **Gravitation**
  - *Geodesics, Metric and Perturbations*
  - *Advanced Topics in Cosmology*
  - *Advanced Topics in Gravitational Physics*