Ir. Syahrizal, M.T., IPU

Lecturer of Undergraduate Program in Civil Engineering Study Program
Faculty of Engineering
Universitas Sumatera Utara

syahrizal@usu.ac.id

USU Faculty of Engineering

ft.usu.ac.id/en/lecturer/syahrizal

Ir. Syahrizal, M.T. was born in Banda Aceh on December 31, 1961, and is a Lecturer in Civil Engineering at Universitas Sumatera Utara. He completed a Master's Program in Civil Engineering at ITB in 1994.

Publications

2026
Jurnal nasional

Comparative Analysis of Bill of Quantity Results with Revit, Tekla Structures and Excel Software in the Sei Mangkei Fat Trap Refinery II Construction Project

SYAHRIZAL

2024
Book chapter internasional

Proceedings of the International Conference on Emerging Smart Cities (ICESC2022)

SYAHRIZAL , MUHAMMAD AGUNG PUTRA HANDANA , RAHMI KAROLINA , BUKHARO BANJAI , M WAHYU ALWI SRG

2020
Prosiding seminar internasional

Earned value concept analysis on project monitoring (Case study: Faculty of Forestry Universitas Sumatera Utara building construction phase 1)

SYAHRIZAL

2020
Prosiding seminar internasional

Development of Interlock Bricks with Eruption Ash of Mount Sinabung as One of Its Constituent Materials

SYAHRIZAL

2020
Prosiding seminar internasional

Crack Patterns Analysis on Structural Beam with Slag Cement

SYAHRIZAL

2020
Prosiding seminar internasional

Shear behavior of interlocking masonry brick wall portal with the substitution of Mount Sinabung volcanic ash against pushover static load

SYAHRIZAL

2020
Jurnal internasional

GEOPOLYMER CONCRETE MADE FROM VOLCANIC ASH MOUNT SINABUNG

SYAHRIZAL

2020
Jurnal internasional bereputasi

Geopolymer concrete made from volcanic ash of Mount Sinabung

SYAHRIZAL

2019
Prosiding seminar internasional

The Effect of Clamshell Ash Substitution to the Mechanical Properties of Concrete

SYAHRIZAL

2018
Prosiding seminar internasional

Value Engineering Implementation on Construction Project of Suzuya Plaza, Tanjung Morawa

SYAHRIZAL

2018
Prosiding seminar internasional

Life Cycle Cost Identification on Building Maintenance of Badan Pengelola Keuangan Daerah Pematangsiantar

SYAHRIZAL

2018
Prosiding seminar internasional

The Effect of Polystyrene on Concrete Mechanical Properties

SYAHRIZAL

2018
Prosiding seminar internasional

Slag Cement Optimization on Flexture Strength of High Quality Concrete with Various Treatment

SYAHRIZAL

2018
Prosiding seminar internasional

Utilization of Volcanic Ash of Mount Sinabung as a Substitute for Cement to Flexure Strength of Geopolymer Concrete

SYAHRIZAL

2018
Prosiding seminar internasional

Optimization of fly ash and bottom ash substitution against paving block manufacture according to SNI 03-0691-1996

SYAHRIZAL

2018
Jurnal internasional bereputasi

Preliminary study of sinabung volcanic ash usage in the making of paving block type C and D

SYAHRIZAL

2015
Jurnal internasional bereputasi

Optimization of the use of volcanic ash of Mount Sinabung eruption as the substitution for fine aggregate

SYAHRIZAL

2014
Jurnal internasional bereputasi

The Use of Volcanic Ash of Mount Sinabung Eruption as the Substitution of Fine Aggregate in Making Batako (Mass-Produced Brick)

SYAHRIZAL

2014
Jurnal internasional bereputasi

Acceleration Time Analysis of Project Work on Optimum Structure with Additional Cost

SYAHRIZAL

Researches

2024
Penelitian Unggulan Perguruan Tinggi

Analisis Mekanik Akustik dan Termal Pasangan Dinding Bata Interlock Seat Ampas Tebu sebagai Material Konstruksi Hijau

SYAHRIZAL

2024
Penelitian Unggulan Perguruan Tinggi

Kanstin Beton Fly Ash dengan Lapisan TiO2 sebagai Penyerap Emisi Kendaraan untuk Mengurangi kadar NOx dalam mewujudkan Kota Hijau

SYAHRIZAL

2023

OPTIMIZATION OF PROJECT TIME AND COST IN PANDEMIC ERA BY TIME COST TRADE OFF METHOD OF UNIVERSITAS NEGERI MEDAN CASE STUDY

SYAHRIZAL , GEA GEBY AURORA SYAFRIDON

2022

Optimasi Dimensi Penampang Balok I Pervious Concrete sebagai Penutup Drainase

MUHAMMAD AGUNG PUTRA HANDANA , SYAHRIZAL , INDRA AULIA

2018
Penelitian Unggulan Perguruan Tinggi

Optimasi Penggunaan Slag Semen pada Beton Mutu Tinggi dengan Variasi Umur dan Perendaman

SYAHRIZAL , RIZA INANDA SIREGAR , RAHMI KAROLINA

2018

Beton Geopolimer Berbahan Dasar Abu Erupsi Gunung Sinabung

SYAHRIZAL , RAHMI KAROLINA

2013
Penelitian Hibah Bersaing

Pengembangan Genteng Beton Ringan Sebagai Alternatif Penutup Atap

SYAHRIZAL , RAHMI KAROLINA

Community Services

2026

PEMBANGUNAN MASJID AL-MUWAHHIDIN

SYAHRIZAL

2026

YAYASAN PENDIDIKAN ISLAM TEUKU NYAK ARIF

SYAHRIZAL

2024

TENAGA AHLI PDAM TIRTANADI PROVINSI SUMATERA UTARA

SYAHRIZAL

2023

TENAGA AHLI PDAM TIRTANADI PROVINSI SUMATERA UTARA

SYAHRIZAL

2022

Pengembangan Ekowisata Manggrove Di Desa Kampung Nelayan Kecamatan Medan Belawan Kota Medan

SYAHRIZAL

2019

PENINGKATAN KUALITAS JALAN DI KAMPUNG NELAYAN SEBERANG UNTUK MENINGKATKAN JALUR EKONOMI MASYARAKAT

SYAHRIZAL , RIZA INANDA SIREGAR , RAHMI KAROLINA

Intellectual Property Rights

2022
Paten nasional

Beton Penutup Drainase Lolos Air Untuk Mengatasi Genangan Air

SYAHRIZAL

2022
Paten nasional

Beton Mutu Tinggi Ramah Lingkungan: Optimalisasi Slag Cement Sebagai Bahan Dasar

SYAHRIZAL

2022
Paten nasional

PATEN BUKU MODIFIKASI BATA INTERLOCK

SYAHRIZAL

2021
Hak cipta nasional

Modifikasi Bata Interlock "Substitusi Material Pasir dengan Abu Erupsi"

RAHMI KAROLINA , MUHAMMAD AGUNG PUTRA HANDANA , SYAHRIZAL

2021
Paten nasional

BETON LOLOS AIR SEBAGAI PENUTUP DRAINASE UNTUK MENGATASI GENANGAN AIR

SYAHRIZAL , MUHAMMAD AGUNG PUTRA HANDANA , RAHMI KAROLINA

2021
Paten nasional

KOMPOSISI BATA BETON (PAVINGBLOCK) AGREGAT ABU VULKANIK, BESERTA CAMPURANNYA

SYAHRIZAL

2021
Hak cipta nasional

Bata Interlock Berbahan Abu Sinabung

SYAHRIZAL , MUHAMMAD AGUNG PUTRA HANDANA , RAHMI KAROLINA , ZIKRI NOER